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SUBJECT: SPECTROGRAPHIC ANALYSIS OF NORMAL HUMAN TISSUE
FROM BALTIMORE, MARYLAND

TO: K. Z. Morgan

FROM: I. H. Tipton, M. J. Cook, R. L. Steiner, J. M. Foland
K. K. McDaniel, and S. D. FentressDistribution

- 1-5. K. Z. Morgan
- 6-12. E. G. Struxness
- 13. A. M. Weinberg
- 14. J. A. Swartout
- 15. E. J. Murphy
- 16. R. A. Charpie
- 17. H. P. Yockey
- 18. J. A. Norris
- 19. A. C. Upton
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- 21-26. M. J. Cook
- 27-52. I. H. Tipton (UT)
- 53. C. S. Shoup (ORO-AEC)
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- 55. W. D. Claus (AEC-Washington)
- 56. C. L. Dunham (AEC-Washington)
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438 01

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SPECTROGRAPHIC ANALYSIS OF NORMAL HUMAN TISSUE FROM BALTIMORE, MARYLAND

I. H. Tipton,* M. J. Cook,** R. L. Steiner,* J. M. Foland,*
K. K. McDaniel,** and S. D. Fentress*

All tissues included in this report were received from the Medical Examiner's Office, Baltimore, Maryland and were collected, ashed and analyzed according to the methods described in ORNL-CF-57-2-2.

For those tissues in which an element does not appear in every sample, the lowest value is reported as less than the limit of sensitivity of the method for that element in that tissue.

In the following tables the average value for those elements which appear in every sample of a tissue is the arithmetic mean of the individual values. For those elements which do not appear in every sample the average value was determined by analyzing a well-mixed composite sample containing an amount of the ash of each individual tissue equivalent to one gram of wet tissue. For example, of the 23 aortas analyzed all contained Al and the average reported is the arithmetic mean of the 23 individual values; whereas, only 15 contained Ni and the average reported is the value determined from the composite sample.

* Physics Department, University of Tennessee, Knoxville, Tennessee
** Health Physics Division, Oak Ridge National Laboratory, operated by Union Carbide Nuclear Company for U. S. Atomic Energy Commission, Oak Ridge, Tennessee.

Table 1

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Adrenal (3 samples analyzed)

0.8% Highest Ash Value
0.4% Lowest Ash Value
0.63% Average Ash Value

61.2% Highest Dry Weight
48.6% Lowest Dry Weight
55.6% Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	3		0.54	0.92	0.27
Barium	3		0.02	0.03	<0.002*
Bismuth	1		0.22		
Boron	1	1*		<0.08*	<0.04
Cadmium	1	2*	0.39	0.53*	<0.24*
Calcium	3		44	50	33
Chromium	3		0.059	0.075	0.05
Cobalt	1		0.074		
Copper	3		1.1	1.3	0.88
Gallium					
Gold		1*	0.14*		
Iron	3		57	68	48
Lead	3		0.17	0.18	0.16
Magnesium	3		50	64	42
Manganese	3		0.23	0.39	0.13
Molybdenum	3		0.97	0.13	0.06
Nickel	3		0.05	0.06	0.04
Phosphorus	3		1000	1200	800
Potassium	3		1100	1300	680
Silver		1*	0.002*		
Strontium	3		0.015	0.02	0.007
Tin	2	1*	0.13	0.27	<0.04*
Titanium	2		0.19**	0.19	<0.04
Vanadium					
Zinc	3		9	11	7

*Trace

**Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L - Very low value omitted.

H - Very high value omitted

N. D. - Not determined.

Table 2

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Aorta (23 samples analyzed)

5.6%	Highest Ash Value	56.4%	Highest Dry Weight
1.1%	Lowest Ash Value	24.6%	Lowest Dry Weight
2.4%	Average Ash Value	33.2%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	23		0.7	3.5	0.1
Barium	20	1N.D.	0.26**	1.29	0.003*
Bismuth	5	2*	1.0**	8.7	<0.04*
Boron					
Cadmium					
Calcium	21	2L	1600	5500	420
Chromium	12	5N.D.	0.079**	1.02	<0.002
Cobalt	5		0.46**	2	<0.04
Copper	23		1.5	3.6	0.69
Gallium					
Gold					
Iron	23		78	160	28
Lead	22		7.7**	10.4	<0.06
Magnesium	22	1H	300	950 (1960)	92
Manganese	17	6N.D.	0.13	0.22	0.08
Molybdenum					
Nickel	15		0.26**	0.98	<0.11
Phosphorus	23		1300	4800	530
Potassium	23		1500	3500	380
Silver	2	3*		0.042	<0.007
Strontium	22	1L	0.55	2.5	0.13 (0.05)
Tin	15	4*	0.3**	0.75	<0.06
Titanium	5		0.14**	0.8	<0.11
Vanadium					
Zinc	23		34	68	16

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 3

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Bone (31 Samples Analyzed)

<u>60%</u>	Highest Ash Value
<u>5%</u>	Lowest Ash Value
<u>21%</u>	Average Ash Value

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Aluminum	31	1.53	10	0.11
Barium				
Bismuth				
Boron	8	Not Determined	0.9	0.01
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	31	150	600	30
Gallium				
Gold				
Iron	31	7	40	0.2
Lead	31	0.002	0.005	0.0001
Lithium	31	880	2100	190
Magnesium	31	Not Determined	1500	270
Manganese				
Molybdenum				
Nickel	31	1300	2900	370
Phosphorus				
Potassium				
Silver	31	9	20	1.1
Sodium	31	Not Determined	170	12
Strontium				
Tin				
Titanium	31	60	170	12
Vanadium				
Zinc				

* Trace

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

Table 4

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Brain (25 samples analyzed)

<u>2.9%</u>	Highest Ash Value	<u>28.4%</u>	Highest Dry Weight
<u>1.1%</u>	Lowest Ash Value	<u>12.4%</u>	Lowest Dry Weight
<u>1.6%</u>	Average Ash Value	<u>21.6%</u>	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	25		0.3	1.2	0.08
Barium	5	4*	0.003**	0.042	<0.003*
Bismuth		1*	<0.032*		
Boron					
Cadmium					
Calcium	25		120	290	66
Chromium	20	5*	0.033	0.203	<0.001*
Cobalt					
Copper	25		6.5	11.3	1.3
Gallium					
Gold					
Iron	25		47	72	9
Lead	7	1 L 6*	0.26**	1.05	<0.07
Magnesium	25		150.	270	96
Manganese	25		0.26	0.47	0.12
Molybdenum					
Nickel	2	1*		0.2	<0.11
Phosphorus	25		3500	6200	1400
Potassium	25		3200	6300	1600
Silver	15	2*		<0.08*	<0.007
Strontium	22	3*	0.03	0.08	<0.01
Tin		1*	0.16*		
Titanium					
Vanadium					
Zinc	25		12	27	9

*--Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium, and Zirconium were sought in every sample but were not detected.

L - Very Low Value Omitted

H - Very High Value Omitted

N.D.-Not determined

Table 5

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Breast (1 sample analyzed)0.2% Average Ash Value 80.6% Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	1	0.52		
Barium	1	0.006		
Bismuth				
Boron				
Cadmium				
Calcium	1	62		
Chromium	1	0.017		
Cobalt	1	0.02		
Copper	1	0.24		
Gallium				
Gold				
Iron	1	6		
Lead	1	0.02		
Magnesium	1	20		
Manganese	1	0.03		
Molybdenum				
Nickel	1	0.09		
Phosphorus	1	90		
Potassium	1	120		
Silver	1*	0.001*		
Strontium	1	0.03		
Tin	1	0.11		
Titanium	1	0.06		
Vanadium				
Zinc	1	2		

* Trace

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

Table 6

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Diaphragm (22 samples analyzed)

1.5%	Highest Ash Value	45.9%	Highest Dry Weight
0.6%	Lowest Ash Value	20.5%	Lowest Dry Weight
1.1%	Average Ash Value	29.3%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	22	0.39	0.55	0.17
Barium	21	0.04**	0.135	<0.002*
Bismuth	4	0.34**	5	<0.007
Boron				
Cadmium				
Calcium	22	76	200	17
Chromium	22	0.045	0.21	0.005
Cobalt	4	1.1**	2.7	<0.03
Copper	22	1.4	2.3	0.76
Gallium				
Gold				
Iron	22	41	57	24
Lead	6	0.18**	1.13	<0.03
Magnesium	22	160	260	96
Manganese	22	0.14	0.38	0.06
Molybdenum				
Nickel	12	0.12**	0.56	<0.06
Phosphorus	22	1300	1900	840
Potassium	22	2700	4500	930
Silver	1*	0.008*		
Strontium	22	0.03	0.06	0.02
Tin	5	0.15**	0.29	<0.03
Titanium	1*	<0.06*		
Vanadium				
Zinc	22	46	66	27

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

Table 7

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Esophagus (11 samples analyzed)

1.3% Highest Ash Value

0.6% Lowest Ash Value

0.93% Average Ash Value

24.1% Highest Dry Weight

15.4% Lowest Dry Weight

19.8% Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	11		0.52	0.92	0.11
Barium	9	2L	0.035	0.092	0.018
Bismuth	3		0.14**	0.92	<0.002*
Boron					
Cadmium					
Calcium	11		120	180	75
Chromium	10	1L	0.068	0.31	0.013
Cobalt					
Copper	11		1.5	5.6	0.72
Gallium					
Gold					
Iron	11		35	59	17
Lead	5	4*	0.32**	0.33	<0.03
Magnesium	11		120	160	63
Manganese	11		0.12	0.18	0.07
Molybdenum					
Nickel	8			0.48	<0.06
Phosphorus	11		780	950	620
Potassium	11		1800	3100	930
Silver					
Strontium	11		0.06	0.1	0.04
Tin	9	1*	0.31**	0.68	<0.03
Titanium	1	1*	0.09**	0.09*	<0.06
Vanadium	1	1*	0.009**	0.09	<0.006
Zinc	11		21	24	15

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 8

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Heart (25 samples analyzed)

1.3%	Highest Ash Value	40.9%	Highest Dry Weight
0.8%	Lowest Ash Value	17.4%	Lowest Dry Weight
1.1%	Average Ash Value	25.5%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	25		0.3	1.4	0.06
Barium	13	4*	0.011**	0.043	<0.002
Bismuth	2			0.4	<0.003
Boron					
Cadmium					
Calcium	25		55	130	30
Chromium	23	2H	0.03	0.101	0.005
Cobalt	4	3*	0.03**	0.31	<0.032
Copper	25		3.9	5.0	2.1
Gallium					
Gold		1*	0.24*		
Iron	25		51	76	27
Lead	3	4*	0.06**	0.20	<0.04
Magnesium	25		190	310	120
Manganese	25		0.20	0.27	0.08
Molybdenum					
Nickel	15	1*	0.14**	0.64	<0.08
Phosphorus	25		1700	2700	960
Potassium	25		2700	3900	1400
Silver					
Strontium	25		0.02	0.05	0.01
Tin	6	5*	0.06**	0.39	<0.04
Titanium	6		0.06**	0.66	<0.08
Vanadium					
Zinc	25		27	35	17

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 9

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Duodenum (19 Samples Analyzed)

1.1%	Highest Ash Value	84%	Highest Dry Weight
0.6%	Lowest Ash Value	13.9%	Lowest Dry Weight
0.8%	Average Ash Value	24%	Average Dry Weight

Element	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	18	1H	0.44	2.2	0.07
Barium	19		0.036	0.164	0.007
Bismuth	2			0.33	<0.002
Boron		2*		<0.18	<0.06
Cadmium	2	6*		0.72	<0.42
Calcium	19		80	340	34
Chromium	19		0.037	0.185	0.008
Cobalt	2			0.33	<0.054
Copper	19		2.9	10.4	0.95
Gallium					
Gold					
Iron	19		45	88	13
Lead	15	4*	0.37	0.6	<0.04*
Magnesium	19		100	150	59
Manganese	19		0.5	0.84	0.17
Molybdenum	1			0.06	<0.06
Nickel	12	2*		0.44	<0.06
Phosphorus	19		1300	2200	910
Potassium	19		1500	2800	840
Silver	1			0.06	<0.004
Strontium	19		0.05	0.13	<0.014
Tin	14	1*		0.41	<0.03
Titanium	7	2*		0.27	<0.06
Vanadium	2	2*		0.03	<0.006
Zinc	19		22	31	14

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.-Not determined

Table 10

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Jejunum (22 samples analyzed)

1.0%	Highest Ash Value	23.5%	Highest Dry Weight
0.6%	Lowest Ash Value	15.1%	Lowest Dry Weight
0.8%	Average Ash Value	18.4%	Average Dry Weight

Elements	Number of Samples Containing Elements		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	21	1H	0.43	2(5.4)	0.06
Barium	22		0.043	0.144	0.005
Bismuth	3	1H	>8**	0.32(>>6)	0.02
Boron	1	3*		< 0.09*	< 0.06
Cadmium	5	9*	0.4**	1.19	< 0.42
Calcium	22		71	140	32
Chromium	21	1*	0.035	0.105	< 0.001*
Cobalt	3		0.2**	2.5	< 0.024
Copper	22		2.1	3	1.2
Gallium					
Gold					
Iron	21	1H	34	74(240)	15
Lead	17	1 N.D. 4*	0.15	0.18	< 0.03
Magnesium	21	1H	110	200 (780)	70
Manganese	22		0.55	1.32	0.2
Molybdenum	4		< 0.08**	0.12	< 0.06
Nickel	13	2*	0.04**	0.2	< 0.06*
Phosphorus	22		1600	2800	870
Potassium	22		1500	2600	840
Silver	3	1*	< 0.001**	0.34	< 0.004
Strontium	22		0.06	0.13	0.02
Tin	19	1*	0.30**	1.62	< 0.03
Titanium	1	1*	0.04**	0.07	< 0.06
Vanadium	2			0.07	< 0.006
Zinc	22		17.6	30	11

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L-Very Low Value Omitted

H-Very High Value Omitted

N.D.-Not determined

Table 11

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Ileum (21 samples analyzed)

2.2 %	Highest Ash Value	70.9%	Highest Dry Weight
0.2 %	Lowest Ash Value	13.2%	Lowest Dry Weight
0.8 %	Average Ash Value	22.0%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
				(>90)	
Aluminum	20	1H	0.8	2.5	0.21
Barium	21		0.102	0.36	0.02
Bismuth	4			0.69	<0.008
Boron	1	2*		0.06	<0.02
Cadmium		4*		<0.55*	<0.14
Calcium	21		160	380	16
Chromium	20	1N.D.	0.043	0.21	0.006
Cobalt	7			0.68	0.008
Copper	21		2.2	5.5	0.6
Gallium					
Gold					
Iron	21		1000	1900	57
Lead	20	1N.D.	0.31	0.92	<0.04
Magnesium	21		160	410	30
Manganese	19	2H	0.62	1.4 (>>5)	0.15
Molybdenum	10			0.49	0.02
Nickel	18			0.73	<0.02
Phosphorus	21		1000	1800	300
Potassium	21		1000	1900	57
Silver	4	3*		0.04	<0.001
Strontium	20	1N.D.	0.13	0.37	0.02
Tin	20	1N.D.	1.1	10.4	<0.05*
Titanium	14	1*		0.16	<0.02
Vanadium	8	3*		0.22	<0.002
Zinc	21		26	59	11

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 12

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Cecum (19 Samples Analyzed)

1.3%	Highest Ash Value	43.7%	Highest Dry Weight
0.4%	Lowest Ash Value	15.5%	Lowest Dry Weight
0.65%	Average Ash Value	24 %	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	18	1H	1.3	4.4	0.05
Barium	19		0.093	0.27	0.018
Bismuth	5			1.0	<0.016
Boron		1*	<0.07*		
Cadmium	1	1*		0.38	<0.28
Calcium	19		150	290	60
Chromium	19		0.047	0.21	0.007
Cobalt	6	1*		6.3	<0.014
Copper	19		1.3	2.1	0.68
Gallium					
Gold					
Iron	19		24	60	10
Lead	14	5*	0.26	1.12	<0.035*
Magnesium	19		180	380	20
Manganese	17	2H	0.90	2.8 (>> 5)	0.08
Molybdenum	2			0.15	<0.04
Nickel	17	2*	0.22	0.7	<0.04
Phosphorus	19		680	1100	290
Potassium	19		1100	2200	320
Silver	6	1*		0.01	<0.002
Strontium	19		0.25	0.94	0.034
Tin	19		1.3	5.5	0.11
Titanium	10			0.15	<0.04
Vanadium	9	1*		0.04	<0.004
Zinc	19		23	40	10

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

Table 13

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Sigmoid Colon (22 samples analyzed)

1.0%	Highest Ash Value	29.4%	Highest Dry Weight
0.3%	Lowest Ash Value	18.2%	Lowest Dry Weight
0.7%	Average Ash Value	22.4%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	21	1H	0.49	1.4	0.07
Barium	19	2L 1H	0.051	0.133 (0.6)	<0.01
Bismuth	5		0.17**	0.48	<0.012
Boron					
Cadmium		3*	<0.3**	<0.53*	<0.21
Calcium	22		110	230	57
Chromium	21	1L	0.066	0.38	0.009
Cobalt	7		0.42**	6.2	<0.012
Copper	22		1.6	3.2	0.58
Gallium					
Gold					
Iron	22		19	56	6
Lead	12	7*	0.12**	2.6	<0.02
Magnesium	22		160	520	59
Manganese	22		0.31	0.8	0.08
Molybdenum					
Nickel	21		0.18**	0.74	<0.03
Phosphorus	22		820	1600	330
Potassium	22		1400	2400	360
Silver	2	2*	<0.001**	0.05	<0.002
Strontium	22		0.1	0.42	0.02
Tin	22		0.31	1.26	0.05
Titanium	6		0.05**	0.11	<0.03
Vanadium	2	2*		0.06	<0.003
Zinc	22		19	46	9

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 14

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Intestine - Rectum (20 samples analyzed)

2.0% Highest Ash Value 70.8% Highest Dry Weight
 0.3% Lowest Ash Value 16.1% Lowest Dry Weight
 0.8% Average Ash Value 25.0% Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	20	0.97	10.4	0.09
Barium	19	0.066	0.193	<0.0009
Bismuth	5		1.47	<0.012
Boron	1	0.08		
Cadmium	1*	<0.3*		
Calcium	20	150	410	30
Chromium	20	0.046	0.138	0.007
Cobalt	6		0.7	0.053
Copper	20	1.3	4.7	0.6
Gallium				
Gold				
Iron	20	1800	5000	360
Lead	14	0.42	6	<0.03
Magnesium	20	200	490	91
Manganese	20	0.54	2.9	0.07
Molybdenum	2		0.08	<0.03
Nickel	19	0.2	0.6	<0.03
Phosphorus	20	850	1900	350
Potassium	20	1800	5000	360
Silver	2		0.03	<0.002
Strontium	20	0.16	0.64	0.02
Tin	16	2*	5.6	<0.02
Titanium	9	1*	1.16	<0.03
Vanadium	3	4*	0.44	<0.003
Zinc	20	31	66	14

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium
 were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 15

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue: Kidney (25 samples analyzed)

1.3%	Highest Ash Value	28.7%	Highest Dry Weight
1.0%	Lowest Ash Value	14.2%	Lowest Dry Weight
1.1%	Average Ash Value	21.8%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	24	1H	0.26	0.5 (1.9)	0.06
Barium	18	4*	0.018**	0.084	<0.003
Bismuth	6	1*	0.10**	0.47	<0.04
Boron	1		0.13*		
Cadmium	24	1N.D.	31	56	14.4
Calcium	25		130	280	50
Chromium	25		0.06	0.43	0.001
Cobalt	4	1*		0.06	<0.04
Copper	25		2.9	4.1	1.8
Gallium					
Gold					
Iron	25		93	190	52
Lead	25		1.3	3.8	0.36
Magnesium	25		140	210	92
Manganese	25		0.82	1.43	0.38
Molybdenum	25		0.33	0.59	0.19
Nickel	15	1*	0.07**	0.19	<0.1
Phosphorus	25		1700	2700	1000
Potassium	25		1900	2700	960
Silver	1		0.11		
Strontium	25		0.05	0.13	0.02
Tin	21	4*	0.26	0.86	<0.06
Titanium	3		0.04**	0.24	<0.1
Vanadium					
Zinc	24	1L	48	70	18 (5.2)

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N. D- Not determined

Table 16

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Larynx (18 samples analyzed)

4.4% Highest Ash
 1.2% Lowest Ash Value
 2.5% Average Ash Value

43.3% Highest Dry Weight
 21.7% Lowest Dry Weight
 33.3% Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	18		0.73	3.9	0.09
Barium	18		0.27	1.14	0.041
Bismuth	3		0.34**	3.2	<0.05
Boron					
Cadmium					
Calcium	18		2000	5100	220
Chromium	7	10N.D. 1*	0.15	0.31	<0.003
Cobalt	1		0.07		
Copper	18		1.2	5.7	0.3
Gallium					
Gold					
Iron	18		26	52	12
Lead	18		1.7	4.2	0.18
Magnesium	18		330	820	110
Manganese	8	9N.D. 1*	0.17	0.32	<0.03
Molybdenum					
Nickel	11	1*	0.21**	0.96	<0.12
Phosphorus	17	1N.D.	1500	3200	560
Potassium	17	1N.D.	1400	2400	510
Silver	1	2*		0.023*	<0.007
Strontium	18		0.54	1.1	0.13
Tin	10	3*	0.15**	0.52	<0.06
Titanium	3		0.18**	1.44	<0.12
Vanadium					
Zinc	18		26	65	9

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium
 were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

BALTIMORE

Table 17

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Liver (24 samples analyzed)

3.4%	Highest Ash Value	61.2%	Highest Dry Weight
0.9%	Lowest Ash Value	25.9%	Lowest Dry Weight
1.5%	Average Ash Value	37.8%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	23	LH	0.66	2.6 (5.6)	0.1
Barium	2	2*	0.002**	0.031	<0.003
Bismuth	2	3*	<0.05**	0.22	<0.036
Boron					
Cadmium	24		1.8	4.3	0.39
Calcium	24		79	150	36
Chromium	24		0.038	0.165	0.004
Cobalt	8	1*	<0.05**	0.13	<0.04
Copper	24		13	28	3.3
Gallium					
Gold					
Iron	24		220	680	38
Lead	24		2.2	7.5	0.38
Magnesium	24		180	270	120
Manganese	24		1.2	2.3	0.56
Molybdenum	24		1.02	2.6	0.42
Nickel	12	1*	0.05**	0.51	<0.09
Phosphorus	24		2800	4700	1900
Potassium	24		3100	5400	1700
Silver	20	1*	0.027**	0.059	<0.005
Strontium	21	3*	0.02	0.04	<0.01
Tin	21	2*	0.38**	1.26	<0.05
Titanium	3		<0.05**	0.26	<0.09
Vanadium	1		0.04		
Zinc	23	LL	48	75	26 (4.3)

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 18

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Lung (24 samples analyzed)

1.5%	Highest Ash Value	35.8%	Highest Dry Weight
0.9%	Lowest Ash Value	15.9%	Lowest Dry Weight
1.1%	Average Ash Value	22.5%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	24	30	120	2.2
Barium	24	0.19	0.52	0.053
Bismuth	3	0.20**	2.6	<0.04
Boron				
Cadmium	3	3*	<0.5**	1.1*
Calcium	24	140	240	88
Chromium	24	0.41	1.27	0.113
Cobalt	2	0.37**	1.06	<0.04
Copper	24	1.4	2.3	1.0
Gallium	6	2*	0.054	<0.011
Gold				
Iron	24	420	990	75
Lead	24	0.63	1.87	0.16
Magnesium	24	95	140	70
Manganese	24	0.25	0.79	0.08
Molybdenum				
Nickel	22	1H	0.45**	<0.052
			(9.0)	
Phosphorus	24	970	1800	650
Potassium	24	2300	3500	1100
Silver		1*	0.006*	
Strontium	24	0.08	0.13	0.04
Tin	23	1H	0.49	0.06
			(10.6)	
Titanium	24	3.6	14.4	0.22
Venadium	17	0.10**	0.24	<0.009
Zinc	24	12	16	9

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 19

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Muscle - Pectoral (2 samples analyzed)

1.3%	Highest Ash Value	30.5%	Highest Dry Weight
1.1%	Lowest Ash Value	27.3%	Lowest Dry Weight
1.2%	Average Ash Value	28.9%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	2	0.23	0.26	0.2
Barium	1	<0.007		
Bismuth				
Boron				
Cadmium				
Calcium	2	36.5	37	36
Chromium	2	0.076	0.109	0.042
Cobalt				
Copper	2	0.57	0.62	0.52
Gallium				
Gold				
Iron	2	29	34	23
Lead				
Magnesium	2	150	170	140
Manganese	2	0.025	0.03	0.02
Molybdenum				
Nickel	2	0.28	0.38	0.18
Phosphorus	2	1650	1700	1600
Potassium	2	3400	3800	3000
Silver				
Strontium	2	0.015	0.02	0.01
Tin				
Titanium				
Vanadium				
Zinc	2	48	52	44

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 20

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Muscle - Psoas (23 samples analyzed)

1.9%	Highest Ash Value	46.5%	Highest Dry Weight
1.0%	Lowest Ash Value	19.7%	Lowest Dry Weight
1.3%	Average Ash Value	30.1%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	23		0.35	1.9	0.04
Barium	4	1*	0.018**	0.063	<0.003
Bismuth	1	1*		0.23	<0.04
Boron					
Cadmium					
Calcium	23		42	140	19
Chromium	22	1H	0.026	0.094 (0.56)	0.004
Cobalt	2			1.24	<0.04
Copper	23		0.95	2.1	0.5
Gallium					
Gold					
Iron	23		41	71	26
Lead	1	2*	<0.06**	0.19*	<0.05
Magnesium	23		220	480	110
Manganese	23		0.06	0.13	0.02
Molybdenum					
Nickel	10		0.14**	1.26	<0.1
Phosphorus	23		1800	2400	1200
Potassium	23		3600	6700	1200
Silver					
Strontium	19	4*	0.02	0.06	<0.004
Tin					
Titanium		1*	0.1*		
Vanadium					
Zinc	23		54	80	29

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 21

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Omentum (23 samples analyzed)

0.5% Highest Ash Value 95.2% Highest Dry Weight
 0.08% Lowest Ash Value 80.0% Lowest Dry Weight
 0.19% Average Ash Value 89.1% Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (μg/g)		Highest Value (μg/g)	Lowest Value (μg/g)
Aluminum	21	2H		0.76	4.8	0.08
Barium	23			0.021	0.099	0.002
Bismuth	5			0.78**	0.48	<0.003
Boron	1			0.034		
Cadmium		2N.D. 4*		<0.05**	<0.23*	<0.06
Calcium	23			33	110	12
Chromium	23			0.043	0.29	0.004
Cobalt	8			0.02**	0.25	<0.003
Copper	23			0.33	0.81	0.12
Gallium						
Gold		2*			<0.10*	<0.04
Iron	23			33	90	4
Lead	20	2N.D. 1*		0.09	0.65	<0.01*
Magnesium	23			20	60	6
Manganese	23			0.05	0.21	0.02
Molybdenum	3			<0.002**	0.04	<0.008
Nickel	22			0.05**	1.59	<0.008
Phosphorus	22	1L		150	470	62
Potassium	23			390	1000	130
Silver	12	2N.D. 3*		0.002**	0.005	<0.0005
Strontium	23			0.02	0.05	0.003
Tin	16	2N.D. 5*		0.02	0.06	<0.006*
Titanium	22			0.08**	0.38	<0.008
Vanadium	4	2*		0.005**	0.01	<0.0008
Zinc	21	2N.D.		3	9	0.8

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium
 were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 22

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Ovary (2 samples analyzed)

0.9%	Highest Ash Value	21.2%	Highest Dry Weight
0.9%	Lowest Ash Value	21.1%	Lowest Dry Weight
0.9%	Average Ash Value	21.15%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	2	0.56	0.99	0.13
Barium	2	0.02	0.033	0.007
Bismuth				
Boron				
Cadmium				
Calcium	2	240	320	160
Chromium	2	0.032	0.054	0.01
Cobalt				
Copper	2	1	1.3	0.77
Gallium				
Gold				
Iron	2	45	60	31
Lead	2	0.14	0.14	0.14
Magnesium	2	95	100	85
Manganese	2	0.11	0.11	0.1
Molybdenum				
Nickel	1	0.19		
Phosphorus	2	650	680	630
Potassium	2	1150	1200	1100
Silver				
Strontium	2	0.09	0.1	0.09
Tin	2	0.22	0.34	0.09*
Titanium				
Vanadium				
Zinc	2	10	13	8

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 23

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Pancreas (23 samples analyzed)

1.8%	Highest Ash Value	51.7%	Highest Dry Weight
0.7%	Lowest Ash Value	19.1%	Lowest Dry Weight
1.3%	Average Ash Value	34.0%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	22	1H	0.27 (2.6)	0.64	0.09
Barium	11	4*	0.013**	0.054	<0.002
Bismuth	3			0.085	<0.028
Boron	1		0.144		
Cadmium	16	4*	1.2**	2.2	<0.49
Calcium	23		130	250	60
Chromium	23		0.044	0.143	0.007
Cobalt	3		0.3**	1.33	<0.03
Copper	23		1.6	3.2	1.1
Gallium					
Gold		1*	<0.28*		
Iron	23		40	79	19
Lead	23		0.74	1.68	0.09
Magnesium	23		180	300	53
Manganese	23		1.24	2.6	0.39
Molybdenum					
Nickel	7	1*	0.12**	0.15	<0.07
Phosphorus	23		2800	4500	980
Potassium	23		2900	5300	1400
Silver	1	1*		0.01	<0.004
Strontium	23		0.03	0.1	0.02
Tin	6	3*	<0.06**	0.3	<0.04
Titanium					
Vanadium					
Zinc	23		26	41	14

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L-Very Low Value Omitted

H-Very High Value Omitted

N.D-Not determined

Table 24

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Skin (18 samples analyzed)

1.99%	Highest Ash Value	53.8%	Highest Dry Weight
0.4 %	Lowest Ash Value	30.4%	Lowest Dry Weight
0.82%	Average Ash Value	42.2%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	18	2.8	13.6	0.63
Barium	15 3L	0.16	0.7	0.029
Bismuth	2		0.2	<0.03
Boron	3 2*		1.28	<0.04
Cadmium				
Calcium	18	150	190	75
Chromium	17 1L	0.35	1.89	0.053
Cobalt	5	0.03**	0.2	<0.02
Copper	18	0.92	2	0.45
Gallium	1*	<0.016*		
Gold	1*	0.18*		
Iron	18	16	50	5
Lead	18	0.55	2.3	0.08
Magnesium	17 1L	77	220	35
Manganese	17 1H	0.1	0.26 (1.9)	0.03
Molybdenum	2		0.25	<0.04
Nickel	16 1N.D. 1H	0.47	1.26 (8)	0.06
Phosphorus	18	310	480	200
Potassium	18	800	1200	400
Silver	18	0.013	0.034	0.005
Strontium	17 1N.D.	0.1	0.77	0.02
Tin	18	0.28	1.26	0.04
Titanium	17 1H	0.35	1.15 (5.1)	0.07
Vanadium	4	0.02**	0.1	<0.004
Zinc	18	6	9	3

* Trace

*** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Spleen (24 samples analyzed)

1.8%	Highest Ash Weight	37.1%	Highest Dry Weight
0.9%	Lowest Ash Weight	21.3%	Lowest Dry Weight
1.4%	Average Ash Weight	25.6%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	23	LH	0.41	2.6 (7)	0.06
Barium	9	3*	0.018**	1.08	<0.003
Bismuth	1	1*		0.31	<0.036
Boron		1*	0.13*		
Cadmium					
Calcium	24		77	180	18
Chromium	21	3*	0.028	0.117	<0.001*
Cobalt	1		0.06		
Copper	24		1.1	1.6	0.63
Gallium					
Gold					
Iron	24		390	1400	79
Lead	22	LH 1*	0.36	0.87 (12)	<0.13*
Magnesium	24		130	260	66
Manganese	24		0.12	0.17	0.04
Molybdenum					
Nickel	7	3*	0.05**	0.34	<0.09
Phosphorus	24		2300	4100	1200
Potassium	24		3600	5900	2100
Silver					
Strontium	24		0.03	0.07	0.004
Tin	12	7*	0.07**	0.49	<0.05
Titanium	2			0.39	<0.09
Vanadium					
Zinc	24		17	23	10

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 26

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Stomach (24 samples analyzed)

1.1%	Highest Ash Value	46.7%	Highest Dry Weight
0.5%	Lowest Ash Value	9.8%	Lowest Dry Weight
0.8%	Average Ash Value	24.4%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	22	2H	0.28	1.04 (4,9)	0.07
Barium	24		0.037	0.088	0.003
Bismuth	3	1H	>>8**	0.54	<0.02
Boron	1	3*		0.084	≤0.05
Cadmium	3	2*	<0.4**	<0.45*	<0.35
Calcium	24		120	360	46
Chromium	24		0.043	0.21	0.004
Cobalt	3		0.04**	0.56	<0.02
Copper	24		1.7	2.6	0.75
Gallium					
Gold					
Iron	24		31	78	14
Lead	15	7*	0.34**	6.4	<0.03
Magnesium	24		120	210	65
Manganese	24		0.31	0.54	0.16
Molybdenum					
Nickel	14	1*	0.09**	0.32	<0.05
Phosphorus	24		1200	1900	860
Potassium	24		1500	2500	700
Silver		1*	<0.005*		
Strontium	24		0.05	0.15	0.02
Tin	17			4.6	<0.03
Titanium	1		0.04**	0.084	
Venadium					
Zinc	24		18	30	11

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 27

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Testis (17 samples analyzed)

1.5%	Highest Ash Value	22.9%	Highest Dry Weight
0.8%	Lowest Ash Value	12.0%	Lowest Dry Weight
1.2%	Average Ash Value	17.5%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	16	1H	0.33	0.62	0.1
Barium	9	2*		0.057	< 0.004
Bismuth	4	1*	0.05**	0.22	< 0.03
Boron					
Cadmium					
Calcium	17		120	200	70
Chromium	17		0.05	0.112	< 0.002
Cobalt	5		0.31**	3.7	< 0.03
Copper	17		0.91	1.4	0.55
Gallium					
Gold		1*	0.24*		
Iron	17		24	42	6
Lead	12	5*	0.19	0.31	< 0.04
Magnesium	17		140	200	62
Manganese	17		0.14	0.2	0.06
Molybdenum					
Nickel	4	2*	0.06**	0.37	< 0.08
Phosphorus	17		1600	3600	390
Potassium	17		2300	3800	800
Silver	1		0.008		
Strontium	16	LN.D.	0.04	0.06	< 0.02
Tin	9	2*	0.19**	0.35	< 0.04
Titanium	2		0.06**	0.17	< 0.08
Vanadium					
Zinc	17		14	27	7

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 28

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Thymus (1 sample analyzed)0.2% Ash Value
78.9% Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	1	0.32		
Barium	1	0.016		
Bismuth				
Boron				
Cadmium				
Calcium	1	68		
Chromium	1	0.014		
Cobalt				
Copper	1	0.28		
Gallium				
Gold				
Iron	1	11		
Lead	1	0.09		
Magnesium	1	17		
Manganese	1	0.06		
Molybdenum				
Nickel	1	0.02		
Phosphorus	1	160		
Potassium	1	200		
Silver	1	0.002		
Strontium	1	0.02		
Tin	1	0.05		
Titanium	1	0.05		
Vanadium				
Zinc	1	2.4		

* Trace

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

Table 29
Concentrations of Elements in Wet Tissue (Arranged by Elements)

Tissue: Thyroid (3 samples analyzed)

1.4% Highest Ash Value	27.0% Highest Dry Weight
0.8% Lowest Ash Value	23.3% Lowest Dry Weight
1.03% Average Ash Value	25.1% Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	3	0.73	0.9	0.58
Barium	3	0.052	0.095	0.026
Bismuth	2	0.30**	0.43	<0.03
Boron				
Cadmium	1	1*	1.4	<0.56
Calcium	3	260	340	200
Chromium	3	0.024	0.049	0.008
Cobalt	1	0.03		
Copper	3	0.73	0.87	0.54
Gallium				
Gold				
Iron	3	56	83	26
Lead	3	0.13	0.15	0.12
Magnesium	3	73	120	36
Manganese	3	0.14	0.2	0.06
Molybdenum				
Nickel	1	1*	0.17	<0.08
Phosphorus	3	520	670	260
Potassium	3	1100	1600	610
Silver				
Strontium	3	0.07	0.11	0.04
Tin	2	0.25**	0.34	<0.04
Titanium	2	0.06**	0.064	<0.08
Vanadium		1*		
Zinc	3	25	34	19

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 30

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Tongue (2 samples analyzed)

1.3%	Highest Ash Value	30.6%	Highest Dry Value
1.1%	Lowest Ash Value	25.4%	Lowest Dry Value
1.2%	Average Ash Value	28.0%	Average Dry Value

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	2	0.83	1.6	0.1
Barium	2	0.022	0.025	0.018
Bismuth	1	13		
Boron				
Cadmium				
Calcium	2	220	360	84
Chromium	2	0.081	0.107	0.055
Cobalt				
Copper	2	1.4	1.4	1.4
Gallium				
Gold				
Iron	2	36	40	31
Lead	1*	<0.07*		
Magnesium	2	210	270	140
Manganese	2	0.28	0.35	0.21
Molybdenum				
Nickel	2	0.31	0.55	0.07
Phosphorus	2	1250	1300	1200
Potassium	2	2900	3100	2600
Silver				
Strontium	2	0.08	0.12	0.04
Tin	2	0.18	0.22	0.13
Titanium				
Vanadium				
Zinc	2	31	31	31

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 31

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Trachea (13 samples analyzed)

4.4%	Highest Ash Value	53.5%	Highest Dry Weight
1.3%	Lowest Ash Value	24.6%	Lowest Dry Weight
2.2%	Average Ash Value	34.8%	Average Dry Weight

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	12	1H	1.9	4.9	0.19
Barium	13		0.2	0.92	0.026
Bismuth	4		1.3**	9.9	<0.05
Boron	1		0.43		
Cadmium					
Calcium	13		1600	4600	460
Chromium	10	1N.D. 2*	0.09	0.21	<0.003*
Cobalt	2		0.04**	1.63	<0.05
Copper	13		0.99	1.5	0.35
Gallium					
Gold		1*	0.5*		
Iron	13		57	170	13
Lead	13		1.51	4.4	0.44
Magnesium	13		450	1900	110
Manganese	10	3N.D.	0.19	0.3	0.13
Molybdenum					
Nickel	9	2*	0.22**	1.07	<0.1
Phosphorus	13		1100	2600	430
Potassium	13		1900	3300	650
Silver	1		0.008		
Strontium	13		0.6	3.5	0.08
Tin	8	5*	0.28	0.71	<0.08
Titanium	7		0.26**	1.04	<0.13
Vanadium					
Zinc	13		17	37	10

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 32

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Urinary Bladder (18 samples analyzed)

1.4%	Highest Ash Value	54.1%	Highest Dry Value
0.5%	Lowest Ash Value	20.8%	Lowest Dry Value
0.9%	Average Ash Value	29.3%	Average Dry Value

Elements	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	18		0.62	1.3	0.32
Barium	17	1*	0.041	0.071	<0.002*
Bismuth	1	2*	<0.04**	0.57	<0.02
Boron					
Cadmium		3*		0.9*	<0.35
Calcium	18		160	380	98
Chromium	18		0.087	0.29	<0.025
Cobalt	3		<0.04**	2.35	<0.02
Copper	18		0.92	1.7	0.66
Gallium					
Gold					
Iron	18		34	100	15
Lead	10	4*	0.15**	0.2	<0.03
Magnesium	17	1H	130	250	63
Manganese	18		0.13	0.27	<0.05
Molybdenum					
Nickel	14		0.12**	1.38	<0.05
Phosphorus	18		680	1200	340
Potassium	18		1800	2800	690
Silver	1	1*		0.006	<0.003
Strontium	18		0.09	0.25	0.03
Tin	10	3*	0.26**	1.62	<0.03
Titanium	6		0.17**	1.87	<0.05
Vanadium	1	1*		0.11*	<0.005
Zinc	18		23	34	7

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 33

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Uterus (4 samples analyzed)

1.2%	Highest Ash Value	22.6%	Highest Dry Value
0.9%	Lowest Ash Value	19.3%	Lowest Dry Value
1.1%	Average Ash Value	20.9%	Average Dry Value

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (μg/g)	Highest Value (μg/g)	Lowest Value (μg/g)
Aluminum	4	0.36	0.52	0.28
Barium	4	0.12	0.34	0.03
Bismuth				
Boron				
Cadmium				
Calcium	4	320	500	110
Chromium	4	0.08	0.132	0.016
Cobalt				
Copper	4	1.0	1.1	0.86
Gallium				
Gold				
Iron	4	35	43	29
Lead	2		1.32	< 0.05
Magnesium	4	140	230	100
Manganese	4	0.12	0.2	0.08
• Molybdenum				
Nickel	4	0.71	2.2	0.07
Phosphorus	4	960	1100	830
Potassium	4	1400	2200	720
Silver				
Strontium	4	0.14	0.31	0.04
Tin	2		1.26	< 0.05
Titanium				
Vanadium				
Zinc	4	21	31	13

* Trace

** Composite Value

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 34

Concentrations of Elements in Wet Tissue (Arranged by Elements)Tissue Vagina (3 samples analyzed)

2.2%	Highest Ash Value	29.8%	Highest Dry Weight
1.2%	Lowest Ash Value	21.5%	Lowest Dry Weight
1.6%	Average Ash Value	26.4%	Average Dry Weight

Elements	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Aluminum	3	0.43	0.74	0.22
Barium	2		0.072	<0.005
Bismuth				
Boron				
Cadmium				
Calcium	3	290	470	110
Chromium	3	0.13	0.29	0.015
Cobalt				
Copper	3	1.1	1.3	1.1
Gallium				
Gold				
Iron	3	45	47	41
Lead	2		0.4	<0.06
Magnesium	3	110	140	84
Manganese	3	0.12	0.14	0.1
Molybdenum				
Nickel	2	1* 0.22	0.36	<0.11*
Phosphorus	3	740	810	680
Potassium	3	1900	2400	1300
Silver				
Strontium	3	0.10	0.13	0.08
Tin	3	0.17	0.18	0.16
Titanium	1	0.12		
Vanadium				
Zinc	3	19	29	11

* Trace

Antimony, Arsenic, Beryllium, Lanthanum, Niobium, Ruthenium, Thallium and Zirconium were sought in every sample but were not detected.

Table 35

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element: Aluminum

Tissue	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	0.54	0.92	0.27
Aorta	23	23	0.7	3.5	0.1
Bone	31				
Brain	25	25	0.3	1.2	0.08
Breast	1	1	0.52		
Diaphragm	22	22	0.39	0.55	0.17
Esophagus	11	11	0.52	0.92	0.11
Heart	25	25	0.3	1.4	0.06
Intestine					
Duodenum	19	18	0.44	2.2	0.07
Jejunum	22	21	0.43	2	0.06
Ileum	21	20	0.8	(5.4) 2.5	0.21
Cecum	19	18	1.3	((>90) 4.4	0.05
Sigmoid Colon	22	21	0.49	1.4	0.07
Rectum	20	20	0.97	10.4	0.09
Kidney	25	24	0.26	0.5	0.06
Larynx	18	18	0.73	(1.9) 3.9	0.09
Liver	24	23	0.66	2.6	0.1
Lung	24	24	30	(5.6) 120	2.2
Muscle					
Pectoral	2	2	0.23	0.26	0.2
Psoas	23	23	0.35	1.9	0.04
Omentum	23	21	0.76	4.8	0.08
Ovary	2	2	0.56	0.99	0.13
Pancreas	23	22	0.27	0.64	0.09
Skin	18	18	2.8	(2.6) 13.6	0.63
Spleen	24	23	0.41	2.6	0.06
Stomach	24	22	0.28	(7) 1.04	0.07
Testis	17	16	0.33	(4.9) 0.62	0.1
Thymus	1	1	0.32		
Thyroid	3	3	0.73	0.9	0.58
Tongue	2	2	0.83	1.6	0.1
Trachea	13	12	1.9	4.9	0.19
Urinary Bladder	18	18	0.62	1.3	0.32
Uterus	4	4	0.36	0.52	0.28
Vagina	3	3	0.43	0.74	0.22

* Trace

L-Very Low Value Omitted from Average

H-Very High Value Omitted from Average

N.D-Not determined

Table 36

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Barium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3		0.02	0.03	<0.002*
Aorta	23	20	1N.D.	0.26**	1.29	<0.003*
Bone	31	31		1.53	10	<0.11
Brain	25	5	4*	0.003**	0.042	<0.003
Breast	1	1		0.006		
Diaphragm	22	21		0.04**	0.135	<0.002
Esophagus	11	9	2L	0.035	0.092	0.018
Heart	25	13	4*	0.011**	0.043	<0.002
Intestine						
Duodenum	19	19		0.036	0.164	0.007
Jejunum	22	22		0.043	0.144	0.005
Ileum	21	21		0.102	0.36	0.02
Cecum	19	19		0.093	0.27	0.018
Sigmoid Colon	22	19	2L 1H	0.051	0.133 (0.6)	<0.01
Rectum	20	19		0.066	0.193	<0.0009
Kidney	25	18	4*	0.018**	0.084	<0.003
Larynx	18	18		0.27	1.14	0.041
Liver	24	2	2*	0.002**	0.031	<0.003*
Lung	24	24		0.19	0.52	0.053
Muscle						
Pectoral	2					
Psoas	23	4	1*	0.018**	0.063	<0.003
Omentum	23	23		0.021	0.099	0.002
•Ovary	2	2		0.02	0.033	0.007
Pancreas	23	11	4*	0.013**	0.054	<0.002
Skin	18	15	3L	0.16	0.7	0.029
Spleen	24	9	3*	0.018**	1.08	<0.003
Stomach	24	24		0.037	0.088	0.003
Testis	17	9	2*		0.057	<0.004
Thymus	1	1		0.016		
Thyroid	3	3		0.052	0.095	0.026
Tongue	2	2		0.022	0.025	0.018
Trachea	13	13		0.2	0.92	0.026
Urinary Bladder	18	17	1*	0.041	0.071	<0.002*
Uterus	4	4		0.12	0.34	0.03
Vagina	3	2			0.072	<0.005

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

Table 37

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Bismuth

Tissues	Number of Samples Analyzed	Number of Samples Containing Element		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	1		0.22		
Aorta	23	5	2*	1.0**	8.7	<0.04*
Bone	31					
Brain	25		1*	<0.032*		
Breast	1					
Diaphragm	22	4		0.34**	5	<0.007
Esophagus	11	3		0.14**	0.92	<0.002
Heart	25	2		.	0.4	<0.003
Intestine						
Duodenum	19	2			0.33	<0.002
Jejunum	22	3	1H	>8**	0.32 (>>6)	<0.02
Ileum	21	4			0.69	<0.008
Cecum	19	5			1.0	<0.016
Sigmoid Colon	22	5		0.17**	0.48	<0.012
Rectum	20	5			1.47	<0.012
Kidney	25	6	1*	0.10**	0.47	<0.04
Larynx	18	3		0.34**	3.2	<0.05
Liver	24	2	3*	<0.05**	0.22	<0.036
Lung	24	3		0.20**	2.6	<0.04
Muscle						
Pectoral	2					
Psoas	23	1	1*		0.23	<0.04
Omentum	23	5		0.78**	0.48	<0.003
Ovary	2					
Pancreas	23	3			0.085	<0.028
Skin	18	2			0.2	<0.03
Spleen	24	1	1*		0.31	<0.036
Stomach	24	3	1H	>>8**	0.54	<0.02
Testis	17	4	1*	0.05**	0.22	<0.03
Thymus	1					
Thyroid	3	2		0.30**	0.43	<0.03
Tongue	2	1		13		
Trachea	13	4		1.3**	9.9	<0.05
Urinary Bladder	18	1	2*	<0.04**	0.57	<0.02
Uterus	4					
Vagina	3					

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 38

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Boron

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	1	1*	<0.08*	< 0.04
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11				
Heart	25				
Intestine					
Duodenum	19		2*	<0.18	<0.06
Jejunum	22	1	3*	<0.09*	<0.06
Ileum	21	1	2*	0.06	<0.02
Cecum	19		1*	<0.07 *	
Sigmoid Colon	22				
Rectum	20	1	0.8		
Kidney	25	1	0.13*		
Larynx	18				
Liver	24				
Lung	24				
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23	1	0.034		
Ovary	2				
Pancreas	23	1	0.144		
Skin	18	3	2*	1.28	<0.04
Spleen	24		1*	0.13*	
Stomach	24	1	3*	0.084	<0.05
Testis	17				
Thymus	1				
Thyroid	3				
Tongue	2				
Trachea	13	1	0.43		
Urinary Bladder	18				
Uterus	4				
Vagina	3				

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not Determined

Table 39

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Cadmium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	1	2*	0.39	0.53* <0.24*
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11				
Heart	25				
Intestine					
Duodenum	19	2	6*	0.72	<0.42
Jejunum	22	5	9*	0.4**	1.19 <0.42
Ileum	21		4*	<0.55*	<0.14
Cecum	19	1	1*	0.38	<0.28
Sigmoid Colon	22		3*	<0.3**	<0.53* <0.21
Rectum	20		1*	<0.3*	
Kidney	25	24	1N.D.	31	56 14.4
Larynx	18				
Liver	24	24		1.8	4.3 0.39
Lung	24	3	3*	<0.50**	1.1* <0.63
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23		2N.D.	<0.05**	0.23* <0.06
Ovary	2				
Pancreas	23	16	4*	1.2**	2.2 <0.49
Skin	18				
Spleen	24				
Stomach	24	3	2*	<0.4**	<0.45* <0.35
Testis	17				
Thymus	1				
Thyroid	3	1	1*	1.4	<0.56
Tongue	2				
Trachea	13				
Urinary Bladder	18		3*		0.9* <0.35
Uterus	4				
Vagina	3				

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 40

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Calcium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	44	50	33
Aorta	23	21 2L	1600	5500	420
Bone	31	Not Determined			
Brain	25	25	120	290	66
Breast	1	1	62		
Diaphragm	22	22	76	200	17
Esophagus	11	11	120	180	75
Heart	25	25	55	130	30
Intestine					
Duodenum	19	19	80	340	34
Jejunum	22	22	71	140	32
Ileum	21	21	160	380	16
Cecum	19	19	150	290	60
Sigmoid Colon	22	22	110	230	57
Rectum	20	20	150	410	30
Kidney	25	25	130	280	50
Larynx	18	18	2000	5100	220
Liver	24	24	79	150	36
Lung	24	24	140	240	88
Muscle					
Pectoral	2	2	36.5	37	36
Psoas	23	23	42	140	19
Omentum	23	23	33	110	12
Ovary	2	2	240	320	160
Pancreas	23	23	130	250	60
Skin	18	18	150	190	75
Spleen	24	24	77	180	18
Stomach	24	24	120	360	46
Testis	17	17	120	200	70
Thymus	1	1	68		
Thyroid	3	3	260	340	200
Tongue	2	2	220	360	84
Trachea	13	13	1600	4600	460
Urinary Bladder	18	18	160	380	98
Uterus	4	4	320	500	110
Vagina	3	3	290	470	110

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 41

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Chromium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	0.059	0.075	0.05
Aorta	23	12	5N.D. 3*	0.079**	1.02 <0.002
Bone	31	8		0.9	0.9 0.01
Brain	25	20	5*	0.033	0.203 <0.001*
Breast	1	1		0.017	<0.01
Diaphragm	22	22		0.045	0.21 0.005
Esophagus	11	10	1L	0.068	0.31 0.013
Heart	25	23	2H	0.03	0.101 0.005
Intestine					
Duodenum	19	19		0.037	0.185 0.008
Jejunum	22	21	1*	0.035	0.105 <0.001*
Ileum	21	20	1N.D.	0.043	0.21 0.006
Cecum	19	19		0.047	0.21 0.007
Sigmoid Colon	22	21	1L	0.066	0.38 0.009
Rectum	20	20		0.046	0.138 0.007
Kidney	25	25		0.06	0.43 0.001
Larynx	18	7	10N.D. 1*	0.15	0.31 <0.003
Liver	24	24		0.038	0.165 0.004
Lung	24	24		0.41	1.27 0.113
Muscle					
Pectoral	2	2		0.076	0.109 0.042
Psoas	23	22	1H	0.026	0.094 0.004
				(0.56)	
Omentum	23	23		0.043	0.29 0.004
Ovary	2	2		0.032	0.054 0.01
Pancreas	23	23		0.044	0.143 0.007
Spleen	24	21	3*	0.028	0.117 <0.001*
Skin	18	17	1L	0.35	1.89 0.053
Stomach	24	24		0.043	0.21 0.004
Testis	17	17		0.05	0.112 <0.002
Thymus	1	1		0.014	
Thyroid	3	3		0.024	0.049 0.008
Tongue	2	2		0.081	0.107 0.055
Trachea	13	10	1N.D. 2*	0.09	0.21 <0.003*
Urinary Bladder	18	18		0.087	0.29 0.025
Uterus	4	4		0.08	0.132 0.016
Vagina	3	3		0.13	0.29 0.015

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

Table 42 .

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Cobalt

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	1	0.074		
Aorta	23	5	0.46**	2	<0.04
Bone	31				
Brain	25				
Breast	1	1	0.02		
Diaphragm	22	4	1.1**	2.7	<0.03
Esophagus	11				
Heart	25	4	0.03**	0.31	<0.032
Intestine					
Duodenum	19	2		0.33	<0.054
Jejunum	22	3	0.2**	2.5	<0.024
Ileum	21	7		0.68	0.008
Cecum	19	6	1*	6.3	<0.014
Sigmoid Colon	22	7	0.42**	6.2	<0.012
Rectum	20	6		9.77	0.053
Kidney	25	4	1*	0.06	<0.04
Larynx	18	1	0.07		
Liver	24	8	1*	0.13	<0.04
Lung	24	2	0.37**	1.06	<0.04
Muscle					
Pectoral	2				
Psoas	23	2		1.24	<0.04
Omentum	23	8	0.02**	0.25	<0.003
• Ovary	2				
Pancreas	23	3	0.3**	1.33	<0.03
Skin	18	5	0.03**	0.2	<0.02
Spleen	24	1	0.06		
Stomach	24	3	0.04**	0.56	<0.02
Testis	17	5	0.31**	3.7	<0.03
Thymus	1				
Thyroid	3	1	0.03		
Tongue	2				
Trachea	13	2	0.04**	1.63	<0.05
Urinary Bladder	18	3	<0.04**	2.35	<0.02
Uterus	4				
Vagina	3				

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not Determined

Table 43

Concentrations of Elements in Wet Tissue (Arranged by Tissues)

Element Copper

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	1.1	1.3	0.88
Aorta	23	23	1.5	3.6	0.69
Bone	31				
Brain	25	25	6.5	11.3	1.3
Breast	1	1	0.24		
Diaphragm	22	22	1.4	2.3	0.76
Esophagus	11	11	1.5	5.6	0.72
Heart	25	25	3.9	5.0	2.1
Intestine					
Duodenum	19	19	2.9	10.4	0.95
Jejunum	22	22	2.1	3	1.2
Ileum	21	21	2.2	5.5	0.6
Cecum	19	19	1.3	2.1	0.68
Sigmoid Colon	22	22	1.6	3.2	0.58
Rectum	20	20	1.3	4.7	0.6
Kidney	25	25	2.9	4.1	1.8
Larynx	18	18	1.2	5.7	0.3
Liver	24	24	13	28	3.3
Lung	24	24	1.4	2.3	1.0
Muscle					
Pectoral	2	2	0.57	0.62	0.52
Psoas	23	23	0.95	2.1	0.5
Omentum	23	23	0.33	0.81	0.12
Ovary	2	2	1.0	1.3	0.77
Pancreas	23	23	1.6	3.2	1.1
Skin	18	18	0.92	2	0.45
Spleen	24	24	1.1	1.6	0.63
Stomach	24	24	1.7	2.6	0.75
Testis	17	17	0.91	1.4	0.55
Thymus	1	1	0.28		
Thyroid	3	3	0.73	0.87	0.54
Tongue	2	2	1.4	1.4	1.4
Trachea	13	13	0.99	1.5	0.35
Urinary Bladder	18	18	0.92	1.7	0.66
Uterus	4	4	1.0	1.1	0.86
Vagina	3	3	1.1	1.3	1.1

(* Trace)

Table 44

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Gallium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (μg/g)	Highest Value (μg/g)	Lowest Value (μg/g)
Adrenal	3				
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11				
Heart	25				
Intestine					
Duodenum	19				
Jejunum	22				
Ileum	21				
Cecum	19				
Sigmoid Colon	22				
Rectum	20				
Kidney	25				
Larynx	18				
Liver	24				
Lung	24	6	2*	0.054	<0.011
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23				
Ovary	2				
Pancreas	23				
Skin	18		1*	<0.016*	
Spleen	24				
Stomach	24				
Testis	17				
Thymus	1				
Thyroid	3				
Tongue	2				
Trachea	13				
Urinary Bladder	18				
Uterus	4				
Vagina	3				

* Trace

Table 45

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Gold

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (μg/g)	Highest Value (μg/g)	Lowest Value (μg/g)
Adrenal	3	1*	0.14*		
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11				
Heart	25	1*	0.24*		
Intestine					
Duodenum	19				
Jejunum	22				
Ileum	21				
Cecum	19				
Sigmoid Colon	22				
Rectum	20				
Kidney	25				
Larynx	18				
Liver	24				
Lung	24				
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23	2*		<0.1*	<0.04
Ovary	2				
Pancreas	23	1*	<0.28*		
Skin	18	1*	0.18*		
Spleen	24				
Stomach	24				
Testis	17	1*	0.24*		
Thymus	1				
Thyroid	3				
Tongue	2				
Trachea	13	1*	0.5*		
Urinary Bladder	18				
Uterus	4				
Vagina	3				

* Trace

Table 46

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Iron

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	57	68	48
Aorta	23	23	78	160	28
Bone	31	31	150	600	30
Brain	25	25	47	72	9
Breast	1	1	6		
Diaphragm	22	22	41	57	24
Esophagus	11	11	35	59	17
Heart	25	25	51	76	27
Intestine					
Duodenum	19	19	45	88	13
Jejunum	22	21 LH	34	74 (240)	15
Ileum	21	21	1000	1900	57
Cecum	19	19	24	60	10
Sigmoid Colon	22	22	19	56	6
Rectum	20	20	1800	5000	360
Kidney	25	25	93	190	52
Larynx	18	18	26	52	12
Liver	24	24	220	680	38
Lung	24	24	420	990	75
Muscle					
Pectoral	2	2	29	34	23
Psoas	23	23	41	71	26
Omentum	23	23	33	90	4
Ovary	2	2	45	60	31
Pancreas	23	23	40	79	19
Skin	18	18	16	50	5
Spleen	24	24	390	1400	79
Stomach	24	24	31	78	14
Testis	17	17	24	42	6
Thymus	1	1	11		
Thyroid	3	3	56	83	26
Tongue	2	2	36	40	31
Trachea	13	13	57	170	13
Urinary Bladder	18	18	34	100	15
Uterus	4	4	35	43	29
Vagina	3	3	45	47	41

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 47

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Lead

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	0.17	0.18	0.16
Aorta	23	22	7.7**	10.4	<0.06
Bone	31	31	7	40	0.2
Brain	25	7	0.26**	1.05	<0.07
Breast	1	1	0.02		
Diaphragm	22	6	0.18**	1.13	<0.03
Esophagus	11	5	0.32**	0.33	<0.03
Heart	25	3	0.06**	0.20	<0.04
Intestine					
Duodenum	19	15	0.37	0.6	<0.04*
Jejunum	22	17	0.15	0.18	<0.03
Ileum	21	20	0.31	0.92	<0.04
Cecum	19	14	0.26	1.12	<0.035*
Sigmoid Colon	22	12	0.12* *	2.6	<0.02
Rectum	20	14	0.42	6	<0.03
Kidney	25	25	1.3	3.8	0.36
Larynx	18	18	1.7	4.2	0.18
Liver	24	24	2.2	7.5	0.38
Lung	24	24	0.63	1.87	0.16
Muscle					
Pectoral	2				
Psoas	23	1	<0.06**	0.19*	<0.05
Omentum	23	20	0.09	0.65	<0.01*
Ovary	2	2	0.14	0.14	0.14
Pancreas	23	23	0.74	1.68	0.09
Skin	18	18	0.55	2.3	0.08
Spleen	24	22	0.36	0.87	<0.13*
Stomach	24	15	0.34**	6.4	<0.03
Testis	17	12	0.19	0.31	<0.04
Thymus	1	1	0.09		
Thyroid	3	3	0.13	0.15	0.12
Tongue	2		<0.07*		
Trachea	13	13	1.51	4.4	0.44
Urinary Bladder	18	10	0.15**	0.2	<0.03
Uterus	4	2		1.32	<0.05
Vagina	3	2		0.4	<0.06

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D. Not Determined

Table 48

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Magnesium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	50	64	42
Aorta	23	22	300 (1960)	950	92
Bone	31	31	880	2100	190
Brain	25	25	150	270	96
Breast	1	1	20		
Diaphragm	22	22	160	260	96
Esophagus	11	11	120	160	63
Heart	25	25	190	310	120
Intestine					
Duodenum	19	19	100	150	59
Jejunum	22	21	110	200 (780)	70
Ileum	21	21	160	410	30
Cecum	19	19	180	380	20
Sigmoid Colon	22	22	160	520	59
Rectum	20	20	200	490	91
Kidney	25	25	140	210	92
Larynx	18	18	330	820	110
Liver	24	24	180	270	120
Lung	24	24	95	140	70
Muscle					
Pectoral	2	2	150	170	140
Psoas	23	23	220	480	110
Omentum	23	23	20	60	6
Ovary	2	2	95	100	85
Pancreas	23	23	180	300	53
Skin	18	17	77	220	35
Spleen	24	24	130	260	66
Stomach	24	24	120	210	65
Testis	17	17	140	200	62
Thymus	1	1	17		
Thyroid	3	3	73	120	36
Tongue	2	2	210	270	140
Trachea	13	13	450	1900	110
Urinary Bladder	18	17	130	250	63
Uterus	4	4	140	230	100
Vagina	3	3	110	140	84

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 49

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Manganese

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	0.23	0.39	0.13
Aorta	23	17	0.13	0.22	0.08
Bone	31				
Brain	25	25	0.26	0.47	0.12
Breast	1	1	0.03		
Diaphragm	22	22	0.14	0.38	0.06
Esophagus	11	11	0.12	0.18	0.07
Heart	25	25	0.20	0.27	0.08
Intestine					
Duodenum	19	19	0.5	0.84	0.17
Jejunum	22	22	0.55	1.32	0.2
Ileum	21	19	0.62	1.4	0.15
				(>>5)	
Cecum	19	17	0.90	2.8	0.08
				(>>5)	
Sigmoid Colon	22	22	0.31	0.8	0.08
Rectum	20	20	0.54	2.9	0.07
Kidney	25	25	0.82	1.43	0.38
Larynx	18	8	0.17	0.32	<0.03
Liver	24	24	1.2	2.3	0.56
Lung	24	24	0.25	0.79	0.08
Muscle					
Pectoral	2	2	0.025	0.03	0.02
Psoas	23	23	0.06	0.13	0.02
Omentum	23	23	0.05	0.21	0.02
Ovary	2	2	0.11	0.11	0.1
Pancreas	23	23	1.24	2.6	0.39
Skin	18	17	0.1	0.26	0.03
				(1.9)	
Spleen	24	24	0.12	0.17	0.04
Stomach	24	24	0.31	0.54	0.16
Testis	17	17	0.14	0.2	0.06
Thymus	1	1	0.06		
Thyroid	3	3	0.14	0.2	0.06
Tongue	2	2	0.28	0.35	0.21
Trachea	13	10	0.19	0.3	0.13
Urinary Bladder	18	18	0.13	0.27	0.05
Uterus	4	4	0.12	0.2	0.08
Vagina	3	3	0.12	0.14	0.1

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined

Table 50

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Molybdenum

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	0.97	0.13	0.06
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11				
Heart	25				
Intestine					
Duodenum	19	1		0.06	<0.06
Jejunum	22	4	<0.08**	0.12	<0.06
Ileum	21	10		0.49	0.02
Cecum	19	2		0.15	<0.04
Sigmoid Colon	22				
Rectum	20	2		0.08	<0.03
Kidney	25	25	0.33	0.59	0.19
Larynx	18				
Liver	24	24	1.02	2.6	0.42
Lung	24				
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23	3	<0.002**	0.04	<0.008
Ovary	2				
Pancreas	23				
Skin	18	2		0.25	<0.04
Spleen	24				
Stomach	24				
Testis	17				
Thymus	1				
Thyroid	3				
Tongue	2				
Trachea	13				
Urinary Bladder	18				
Uterus	4				
Vagina	3				

* Trace

** Composite Value

Table 51

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Nickel

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	0.05	0.06	0.04
Aorta	23	15	0.26**	0.98	<0.11
Bone	31				
Brain	25	2	1*	0.2	<0.11
Breast	1	1	0.09		
Diaphragm	22	12	1*	0.56	<0.06
Esophagus	11	8		0.48	<0.06
Heart	25	15	1*	0.64	<0.08
Intestine					
Duodenum	19	12	2*	0.44	<0.06
Jejunum	22	13	2*	0.2	<0.06
Ileum	21	18		0.73	<0.02
Cecum	19	17	2*	0.7	<0.04
Sigmoid Colon	22	21		0.74	<0.03
Rectum	20	19		0.6	<0.03
Kidney	25	15	1*	0.19	<0.1
Larynx	18	11	1*	0.96	<0.12
Liver	24	12	1*	0.51	<0.09
Lung	24	22	1H	0.77 (9.0)	<0.052
Muscle					
Pectoral	2	2		0.38	0.18
Psoas	23	10		1.26	<0.1
Omentum	23	22		1.59	<0.008
Ovary	2	1		0.19	
Pancreas	23	7	1*	0.15	<0.07
Skin	18	16	1N.D. 1H	1.26 (8)	0.06
Spleen	24	7	3*	0.34	<0.09
Stomach	24	14	1*	0.32	<0.05
Testis	17	4	2*	0.37	<0.08
Thymus	1	1		0.02	
Thyroid	3	1	1*	0.17	<0.08
Tongue	2	2		0.55	0.07
Trachea	13	9	2*	1.07	<0.1
Urinary Bladder	18	14		1.38	<0.05
Uterus	4	4		2.2	0.07
Vagina	3	2	1*	0.36	<0.11*

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 52

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Phosphorus

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	1000	1200	800
Aorta	23	23	1300	4800	530
Bone	31	Not Determined			
Brain	25	25	3500	6200	1400
Breast	1	1	90		
Diaphragm	22	22	1300	1900	840
Esophagus	11	11	780	950	620
Heart	25	25	1700	2700	960
Intestine					
Duodenum	19	19	1300	2200	910
Jejunum	22	22	1600	2800	870
Ileum	21	21	1000	1800	300
Cecum	19	19	680	1100	290
Sigmoid Colon	22	22	820	1600	330
Rectum	20	20	850	1900	350
Kidney	25	25	1700	2700	1000
Larynx	18	17	1500	3200	560
Liver	24	24	2800	4700	1900
Lung	24	24	970	1800	650
Muscle					
Pectoral	2	2	1650	1700	1600
Psoas	23	23	1800	2400	1200
Omentum	23	22	150	470	62
Ovary	2	2	650	680	630
Pancreas	23	23	2800	4500	980
Skin	18	18	310	480	200
Spleen	24	24	2300	4100	1200
Stomach	24	24	1200	1900	860
Testis	17	17	1600	3600	390
Thymus	1	1	160		
Thyroid	3	3	520	670	260
Tongue	2	2	1250	1300	1200
Trachea	13	13	1100	2600	430
Urinary Bladder	18	18	680	1200	340
Uterus	4	4	960	1100	830
Vagina	3	3	740	810	680

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not Determined

Table 53

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Potassium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	1100	1300	680
Aorta	23	23	1500	3500	380
Bone	31	31	920	1500	270
Brain	25	25	3200	6300	1600
Breast	1	1	1120		
Diaphragm	22	22	2700	4500	930
Esophagus	11	11	1800	3100	930
Heart	25	25	2700	3900	1400
Intestine					
Duodenum	19	19	1500	2800	840
Jejunum	22	22	1500	2600	840
Ileum	21	21	1000	1900	57
Cecum	19	19	1100	2200	320
Sigmoid Colon	22	22	1400	2400	360
Rectum	20	20	1800	5000	360
Kidney	25	25	1900	2700	960
Larynx	18	17	1400	2400	510
Liver	24	24	3100	5400	1700
Lung	24	24	2300	3500	1100
Muscle					
Pectoral	2	2	3400	3800	3000
Psoas	23	23	3600	6700	1200
Omentum	23	23	390	1000	130
Ovary	2	2	1150	1200	1100
Pancreas	23	23	2900	5300	1400
Skin	18	18	800	1200	400
Spleen	24	24	3600	5900	2100
Stomach	24	24	1500	2500	700
Testis	17	17	2300	3800	800
Thymus	1	1	200		
Thyroid	3	3	1100	1600	610
Tongue	2	2	2900	3100	2600
Trachea	13	13	1900	3300	650
Urinary Bladder	18	18	1800	2800	690
Uterus	4	4	1400	2200	720
Vagina	3	3	1900	2400	1300

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 54

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Silver

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Sample Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	1*	0.002*		
Aorta	23	2	3*	0.042	<0.007
Bone	31				
Brain	25	15	2*	<0.08*	<0.007
Breast	1		1*	0.001*	
Diaphragm	22		1*	0.008*	
Esophagus	11				
Heart	25				
Intestine					
Duodenum	19	1		0.06	<0.004
Jejunum	22	3	1*	<0.001**	0.34 <0.004
Ileum	21	4	3*		0.04 <0.001
Cecum	19	6	1*		0.01 <0.002
Sigmoid Colon	22	2	2*	<0.001**	0.05 <0.002
Rectum	20	2			0.03 <0.002
Kidney	25	1		0.11	
Larynx	18	1	2*		0.023* <0.007
Liver	24	20	1*	0.027**	0.059 <0.005
Lung	24		1*	0.006*	
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23	12	2N.D. 3*	0.002**	0.005 <0.0005
Ovary	2				
Pancreas	23	1	1*		0.01 <0.004
Skin	18	18		0.013	0.034 0.005
Spleen	24				
Stomach	24		1*	<0.005*	
Testis	17	1		0.008	
Thymus	1	1		0.002	
Thyroid	3				
Tongue	2				
Trachea	13	1		0.008	
Urinary Bladder	18	1	1*		0.006 <0.003
Uterus	4				
Vagina	3				

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 55

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Strontium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element ($\mu\text{g/g}$)	Highest Value ($\mu\text{g/g}$)	Lowest Value ($\mu\text{g/g}$)
Adrenal	3	3	0.015	0.02	0.007
Aorta	23	22	0.55	2.5	0.13 (0.05)
Bone	31	31	9	20	1.1
Brain	25	22	0.03	0.08	<0.01
Breast	1	1	0.03		
Diaphragm	22	22	0.03	0.06	0.02
Esophagus	11	11	0.06	0.1	0.04
Heart	25	25	0.02	0.05	0.01
Intestine					
Duodenum	19	19	0.05	0.13	0.014
Jejunum	22	22	0.06	0.13	0.02
Ileum	21	20	0.13	0.37	0.02
Cecum	19	19	0.25	0.94	0.034
Sigmoid Colon	22	22	0.1	0.42	0.02
Rectum	20	20	0.16	0.64	0.02
Kidney	25	25	0.05	0.13	0.02
Larynx	18	18	0.54	1.1	0.13
Liver	24	21	0.02	0.04	0.01
Lung	24	24	0.08	0.13	0.04
Muscle					
Pectoral	2	2	0.015	0.02	0.01
Psoas	23	19	0.02	0.06	<0.004
Omentum	23	23	0.02	0.05	0.003
Ovary	2	2	0.09	0.1	0.09
Pancreas	23	23	0.03	0.1	0.02
Skin	18	17	0.1	0.77	0.02
Spleen	24	24	0.03	0.07	0.004
Stomach	24	24	0.05	0.15	0.02
Testis	17	16	0.04	0.06	0.02
Thymus	1	1	0.02		
Thyroid	3	3	0.07	0.11	0.04
Tongue	2	2	0.08	0.12	0.04
Trachea	13	13	0.6	3.5	0.08
Urinary Bladder	18	18	0.09	0.25	0.03
Uterus	4	4	0.14	0.31	0.04
Vagina	3	3	0.10	0.13	0.08

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 56

Concentrations of Elements in Wet Tissues (Arranged by Tissues)Element Tin

Tissues	Number of Samples Analyzed	Number of Samples Containing Elements		Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	2	1*	0.13	0.27	<0.04*
Aorta	23	15	4*	0.3**	0.75	<0.06
Bone	31	Not Determined				
Brain	25		1*	0.16*		
Breast	1	1		0.11		
Diaphragm	22	5	2*	0.15**	0.29	<0.03
Esophagus	11	9	1*	0.31**	0.68	<0.03
Heart	25	6	5*	0.06**	0.39	<0.04
Intestine						
Duodenum	19	14	1*		0.41	<0.03
Jejunum	22	19	1*	0.30**	1.62	<0.03
Ileum	21	20	1N.D.	1.1	10.4	0.05
Cecum	19	19		1.3	5.5	0.11
Sigmoid Colon	22	22		0.31	1.26	0.05
Rectum	20	16	2*		5.6	<0.02
Kidney	25	21	4*	0.26	0.86	<0.06
Larynx	18	10	3*	0.15**	0.52	<0.06
Liver	24	21	2*	0.38**	1.26	<0.05
Lung	24	23	1H	0.49	1.18	0.06
					(10.6)	
Muscle						
Pectoral	2					
Psoas	23					
Omentum	23	16	2N.D.	0.02	0.06	<0.006*
Ovary	2	2		0.22	0.34	0.09*
Pancreas	23	6	3*	<0.06**	0.3	<0.04
Skin	18	18		0.28	1.26	0.04
Spleen	24	12	7*	0.07**	0.49	<0.05
Stomach	24	17			4.6	<0.03
Testis	17	9	2*	0.19**	0.35	<0.04
Thymus	1	1		0.05		
Thyroid	3	2		0.25**	0.34	0.04
Tongue	2	2		0.18	0.22	0.13
Trachea	13	8	5*	0.28	0.71	<0.08
Urinary Bladder	18	10	3*	0.26**	1.62	<0.03
Uterus	4	2			1.26	<0.05
Vagina	3	3		0.17	0.18	0.16

* Trace

** Composite Value

L= Very Low Value Omitted

H= Very High Value Omitted

N.D.= Not determined

Table 57

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Titanium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	2	0.19**	0.19	<0.04
Aorta	23	5	0.14**	0.8	<0.11
Bone	31				
Brain	25				
Breast	1	1	0.06		
Diaphragm	22	1*	<0.06*		
Esophagus	11	1	0.09**	0.09*	<0.06
Heart	25	6	0.06**	0.66	<0.08
Intestine					
Duodenum	19	7	2*	0.27	<0.06
Jejunum	22	1	1*	0.07	<0.06
Ileum	21	14	1*	0.16	<0.02
Cecum	19	10		0.15	<0.04
Sigmoid Colon	22	6	0.05**	0.11	<0.03
Rectum	20	9	1*	1.16	<0.03
Kidney	25	3	0.04**	0.24	<0.1
Larynx	18	3	0.18**	1.44	<0.12
Liver	24	3	<0.05**	0.26	<0.09
Lung	24	24	3.6	14.4	0.22
Muscle					
Pectoral	2				
Psoas	23		1*	0.1*	
Omentum	23	22	0.08**	0.38	<0.008
Ovary	2				
Pancreas	23		0.12**		
Skin	18	17	0.35	1.15 (5.1)	0.07
Spleen	24	2		0.39	<0.09
Stomach	24	1	0.04**	0.084	
Testis	17	2	0.06**	0.17	<0.08
Thymus	1	1	0.05		
Thyroid	3	2	0.06**	0.06	<0.08
Tongue	2				
Trachea	13	7	0.26**	1.04	<0.13
Urinary Bladder	18	6	0.17**	1.87	<0.05
Uterus	4				
Vagina	3	1	0.12		

* Trace

** Composite Value

L-Very Low Value Omitted

H-Very High Value Omitted

N.D-Not determined

Table 58

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Vanadium

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3				
Aorta	23				
Bone	31				
Brain	25				
Breast	1				
Diaphragm	22				
Esophagus	11	1	1* 0.009**	0.09	<0.006
Heart	25				
Intestine					
Duodenum	19	2	2*	0.03	<0.006
Jejunum	22	2		0.07	<0.006
Ileum	21	8	3*	0.22	<0.002
Cecum	19	9	1*	0.04	<0.004
Sigmoid Colon	22	2	2*	0.06	<0.003
Rectum	20	3	4*	0.44	<0.003*
Kidney	25				
Larynx	18				
Liver	24	1	0.04		
Lung	24	17	0.10**	0.24	<0.009
Muscle					
Pectoral	2				
Psoas	23				
Omentum	23	4	2* 0.005**	0.01	<0.0008
Ovary	2				
Pancreas	23				
Skin	18	4	0.024**	0.1	<0.004
Spleen	24				
Stomach	24				
Testis	17				
Thymus	1				
Thyroid	3		1* <0.008*		
Tongue	2				
Trachea	13				
Urinary Bladder	18	1	1*	0.11*	<0.005
Uterus	4				
Vagina	3				

* Trace

** Composite Value

L- Very Low Value Omitted

H- Very High Value Omitted

N.D- Not determined

Table 59

Concentrations of Elements in Wet Tissue (Arranged by Tissues)Element Zinc

Tissues	Number of Samples Analyzed	Number of Samples Containing Element	Average Value for Samples Containing Element (µg/g)	Highest Value (µg/g)	Lowest Value (µg/g)
Adrenal	3	3	9	11	7
Aorta	23	23	34	68	16
Bone	31	31	60	170	12
Brain	25	25	12	27	9
Breast	1	1	2		
Diaphragm	22	22	46	66	27
Esophagus	11	11	21	24	15
Heart	25	25	27	35	17
Intestine					
Duodenum	19	19	22	31	14
Jejunum	22	22	18	30	11
Ileum	21	21	26	59	11
Cecum	19	19	23	40	10
Sigmoid Colon	22	22	19	46	9
Rectum	20	20	31	66	14
Kidney	25	24 1L	48	70	18
					(5.2)
Larynx	18	18	26	65	9
Liver	24	23 1L	48	75	26
					(4.3)
Lung	24	24	12	16	9
Muscle					
Pectoral	2	2	48	52	44
Psoas	23	23	54	80	29
Omentum	23	21 2N.D.	3	9	0.8
Ovary	2	2	10	13	8
Pancreas	23	23	26	41	14
Skin	18	18	6	9	3
Spleen	24	24	17	23	10
Stomach	24	24	18	30	11
Testis	17	17	14	27	7
Thymus	1	1	2.4		
Thyroid	3	3	25	34	19
Tongue	2	2	31	31	31
Trachea	13	13	17	37	10
Urinary Bladder	18	18	23	34	7
Uterus	4	4	21	31	13
Vagina	3	3	19	29	11

* Trace

L- Very Low Value Omitted

H- Very High Value Omitted

N.D.- Not determined