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ADDITIONAL SET OF DATA IN SUPPORT OF

CONCENTRATIONS OF LEAD IN THE TISSUE OF CHILDREN

BY P.S.I. BARRY

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CONCENTRATIONS OF LEAD (ppm) IN BONE SAMPLES COMPARED BY WET WEIGHT AND ASH WEIGHT

AGE GROUP	BONE	SEX	No.	WET WEIGHT			ASH WEIGHT			RATIO ASH/WET
				MEAN	S.D.	RANGE	MEAN	S.D.	RANGE	
0-11 MONTHS	Rib	M&F	38	0.90	1.04	0.03-5.40	4.57	5.56	0.80-30.00	5.1
	Tibia	M&F	38	0.62	0.62	0.02-4.00	1.73	2.06	0.08-13.00	2.8
	Calvaria	M&F	37	0.65	0.48	0.06-2.10	1.49	1.99	0.12-12.50	2.3
1-16 Yrs	Rib	M&F	20	2.40	1.38	0.34-5.50	6.91	3.00	2.10-12.00	2.9
	Tibia	M&F	20	2.85	1.83	0.16-6.20	4.61	2.95	0.27-10.90	1.6
	Calvaria	M&F	20	3.49	2.53	0.43-9.00	5.12	3.51	0.69-10.30	1.5
Male adults (18-84 Yrs)	Rib	M	22	7.10	5.55	0.56-21.00	26.50	25.67	1.70-105.00	3.7
	Tibia	M	22	22.14	18.40	0.06-73.00	34.94	43.27	0.09-205.00	1.6
	Calvaria	M	22	22.89	19.01	0.20-79.00	32.38	29.68	0.30-135.00	1.4
Female adults (18-83 Yrs)	Rib	F	14	5.74	3.81	1.20-12.00	16.92	9.77	4.10-32.00	2.9
	Tibia	F	14	13.74	10.41	3.50-42.00	19.00	14.52	4.40-59.00	1.4
	Calvaria	F	14	13.10	8.30	5.00-33.00	17.28	10.30	6.50-39.00	1.3

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CONCENTRATIONS OF LEAD IN THE TISSUES OF INFANTS OF LESS THAN ONE YEAR OF AGE IN THE YEAR OF SAMPLE COLLECTION (ppm WET WEIGHT)

TISSUE		1966-68 No.	MEAN	S.D.	(RANGE)	1975 No.	MEAN	S.D.	(RANGE)	1976 No.	MEAN	S.D.	(RANGE)	1977 No.	MEAN	S.D.	(RANGE)	1978 No.	MEAN	S.D.	(RANGE)	1979 No.	MEAN	S.D.	(RANGE)
Blood	μ mol/l	4	0.15	0.08	(0.05 0.23)	8	0.61	0.24	(0.29 0.77)	8	0.47	0.22	(0.19 0.92)	8	0.67	0.31	(0.29 1.21)	8	0.65	0.40	(0.24 1.35)	7	0.58	0.34	(0.24 1.21)
	(μg/100 g)		3.2	1.7	(1.1 4.8)		12.6	5.0	(6.0 19.0)		9.80	4.6	(4.0 19.0)		13.8	6.4	(6.0 25.0)		13.4	8.3	(5.0 28.0)		12.1	7.1	(5.0 25.0)
Bone	Rib	8	1.09	0.90	(0.01 2.71)	9	1.04	0.59	(0.52 2.30)	8	1.45	1.61	(0.69 5.40)	9	0.83	0.86	(0.06 2.60)	8	0.94	1.19	(0.03 2.90)	7	0.12	0.06	(0.05 0.23)
										7	*0.89*	*0.25*	*(0.69 1.40)*												
	Tibia	5	0.91	0.54	(0.21 1.53)	9	0.57	0.60	(0.02 1.90)	8	0.50	0.35	(0.04 1.10)	8	0.71	0.22	(0.50 1.21)	8	0.81	1.32	(0.21 4.00)	7	0.53	0.29	(0.21 0.99)
	Calvaria	0				9	0.87	0.65	(0.10 2.10)	8	0.55	0.35	(0.06 1.20)	7	0.69	0.49	(0.14 1.32)	8	0.62	0.63	(0.14 1.81)	7	0.54	0.20	(0.28 0.83)
Liver		8	0.35	0.43	(0.08 1.37)	9	0.19	0.10	(0.08 0.37)	8	0.22	0.11	(0.12 0.48)	9	0.25	0.23	(0.09 0.84)	8	0.35	0.71	(0.03 2.10)	7	0.11	0.11	(0.05 0.[illegible])
		7	*0.21*	*0.15*	*(0.08 0.50)*													7	*0.10*	*0.05*	*(0.03 0.17)*				
Spleen		8	0.10	0.07	(0.02 0.18)	9	0.16	0.12	(0.04 0.43)	7	0.18	0.18	(0.04 0.54)	9	0.21	0.15	(0.06 0.53)	8	0.14	0.19	(0.02 0.54)	7	0.08	0.05	(0.03 0.16)
Kidney	Cortex	8	0.09	0.08	(0.01 0.22)	9	0.20	0.13	(0.08 0.47)	8	0.17	0.11	(0.05 0.36)	6	0.51	0.88	(0.08 2.30)	8	0.09	0.06	(0.02 0.24)				
														5	*0.15*	*0.08*	*(0.08 0.25)*								
	Medulla	8	0.07	0.07	(0.01 0.22)	9	0.14	0.07	(0.05 0.26)	8	0.18	0.08	(0.04 0.31)	6	0.23	0.17	(0.06 0.54)	8	0.07	0.07	(0.01 0.22)				
														5	*0.17*	*0.09*	*(0.06-0.27)*								
	Combined	8	0.08	0.07	(0.01 0.22)	9	0.17	0.09	(0.07 0.37)	8	0.17	0.07	(0.08 0.28)	9	0.29	0.43	(0.05 1.42)	8	0.08	0.06	(0.03 0.23)	7	0.05	0.02	(0.02 0.09)
														8	*0.14*	*0.08*	*(0.05 0.26)*								
	Adrenal	3	0.10	0.08	(0.01 0.14)	7	0.30	0.24	(0.10 0.72)	7	0.30	0.25	(0.10 0.82)	8	0.26	0.13	(0.13 0.46)	7	0.32	0.57	(0.05 1.60)	7	0.05	0.03	(0.02 0.08)
																		6	*0.11*	*0.07*	*(0.05 0.24)*				
	Pancreas	4	0.15	0.15	(0.01 0.31)	5	0.21	0.12	(0.05 0.35)	2	0.37		(0.26 0.47)	6	0.69	0.90	(0.15 2.50)	8	0.24	0.18	(0.06 0.53)	7	0.09	0.09	(0.02 0.28)
														5	*0.12*	*0.15*	*(0.15 0.56)*								
	Thymus	1	0.01			1	0.06			4	0.12	0.07	(0.05 0.20)	9	0.13	0.06	(0.04 0.21)	8	0.07	0.09	(0.02 0.28)	7	0.20	0.28	(0.02 0.78)
																						6	*0.11*	*0.11*	*(0.02 0.[illegible])*
	Thyroid	4	0.11	0.12	(0.01 0.24)	3	0.57	0.63	(0.18 1.30)	0				7	0.46	0.51	(0.06 1.30)	8	0.12	0.08	(0.03 0.26)	7	0.06	0.03	(0.02 0.11)

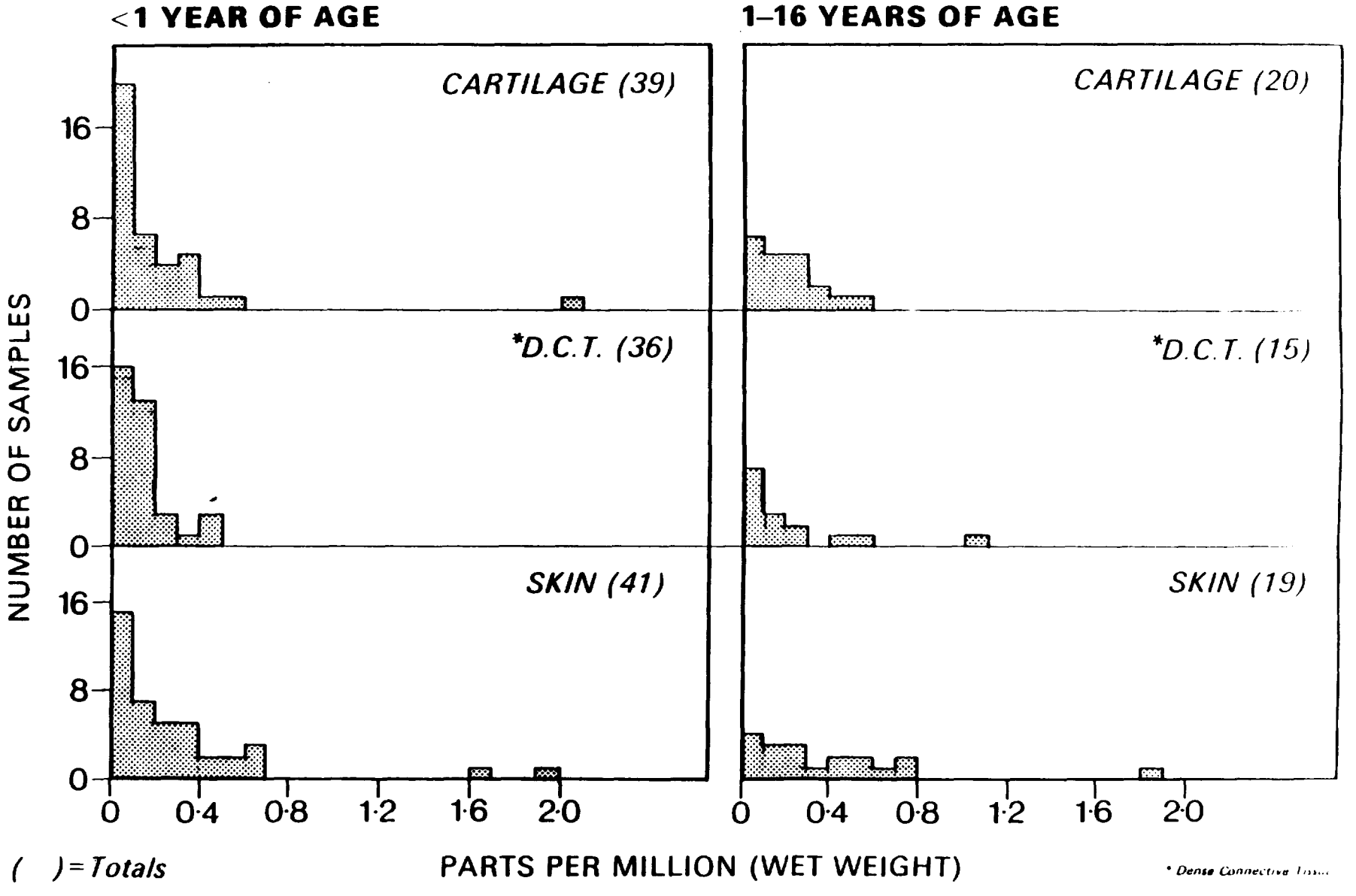
The figures in italics exclude the highest values

CONCENTRATIONS OF LEAD IN THE TISSUES OF INFANTS OF LESS THAN ONE YEAR OF AGE IN THE YEAR OF SAMPLE COLLECTION (ppm WET WEIGHT)

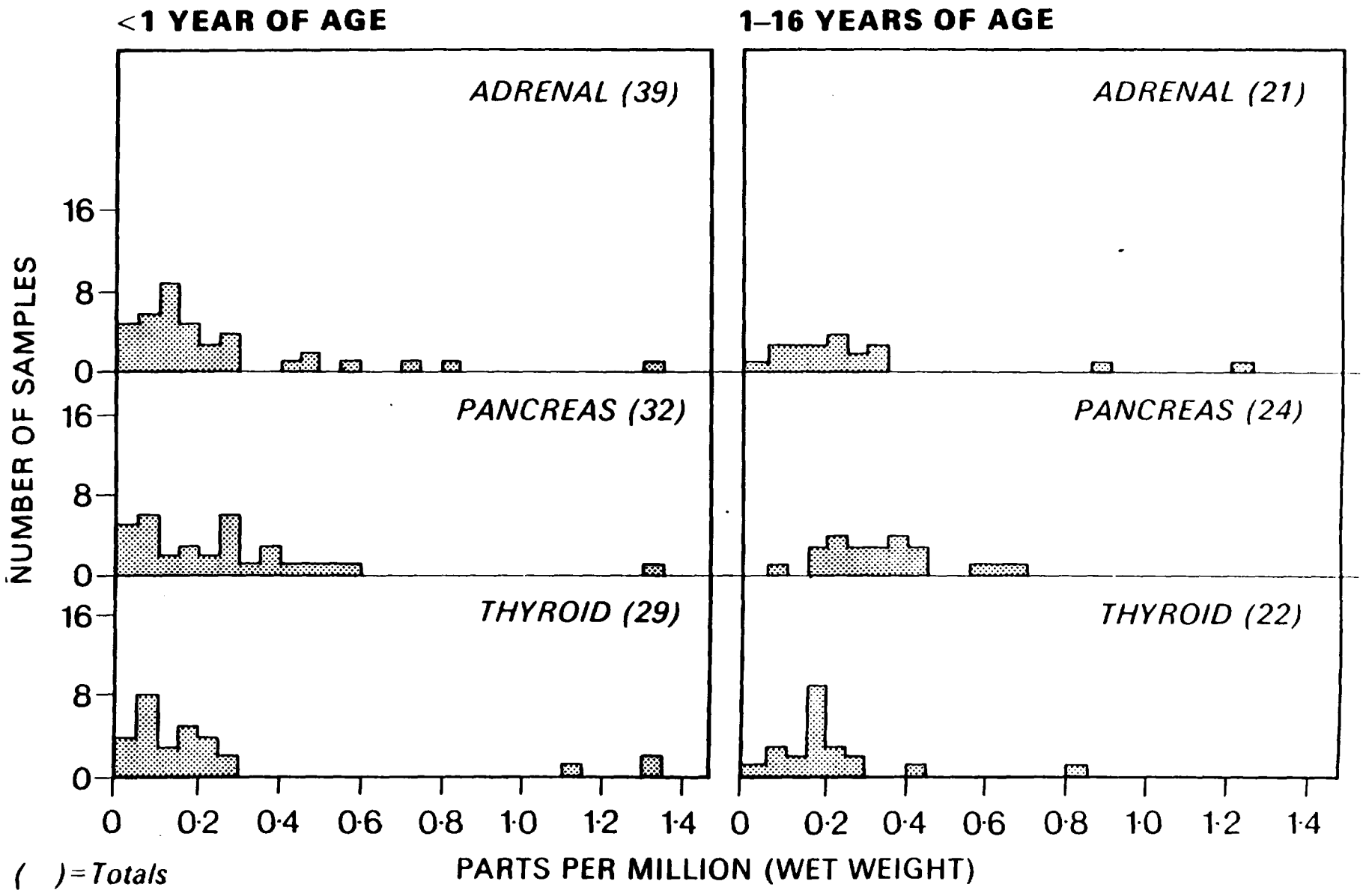
TISSUE	1966-68 No.	MEAN	S.D.	(RANGE)	1975 No.	MEAN	S.D.	(RANGE)	1976 No.	MEAN	S.D.	(RANGE)	1977 No.	MEAN	S.D.	(RANGE)	1978 No.	MEAN	S.D.	(RANGE)	1979 No.	MEAN	S.D.	(RANGE)
Brain Cortex	7	0.04	0.03	(0.01 0.08)	9	0.06	0.06	(0.01 0.18)	8	0.10	0.06	(0.05 0.20)	7	0.10	0.12	(0.01 0.34)	8	0.03	0.02	(0.01 0.06)	7	0.03	0.04	(0.01 0.12)
													6	*0.06*	*0.05*	*(0.01 0.13)*								
Lung	8	0.06	0.05	(0.01 0.18)	9	0.07	0.04	(0.02 0.14)	8	0.08	0.03	(0.04 0.12)	9	0.08	0.03	(0.03 0.15)	8	0.04	0.02	(0.02 0.08)	7	0.05	0.05	(0.02 0.16)
Heart	8	0.04	0.03	*(0.01 0.09)*	9	0.09	0.11	*(0.02 0.37)*	8	0.23	0.43	(0.04 1.30)	9	0.06	0.05	(0.01 0.19)	8	0.03	0.02	*(0.01 0.06)*	6	0.03	0.01	*(0.01 0.04)*
					8	*0.05*	*0.02*	*(0.02 0.09)*	*7*	*0.08*	*0.04*	*(0.04 0.15)*												
Aorta	1	0.11			5	0.36	0.41	(0.13 1.10)	4	0.34	0.17	(0.10 0.48)	9	0.26	0.26	(0.05 0.87)	8	0.15	0.11	(0.03 0.36)	7	0.04	0.01	(0.02 0.06)
					4	*0.18*	*0.06*	*(0.13 0.25)*																
Muscle	5	0.06	0.04	(0.02 0.13)	9	0.13	0.10	(0.03 0.31)	8	0.24	0.14	(0.05 0.48)	9	0.08	0.04	(0.03 0.13)	8	0.03	0.02	(0.01 0.08)	7	0.02	0.01	(0.02 0.04)
Fat	1	0.28			3	0.31	0.22	(0.13 0.55)	0				6	0.23	0.11	(0.11 0.36)	8	0.13	0.10	(0.02 0.30)	7	0.05	0.03	(0.01 0.09)
Skin	1	0.10			8	0.40	0.17	(0.16 0.65)	8	0.45	0.53	(0.09 1.70)	9	0.46	0.57	(0.06 1.90)	8	0.09	0.09	(0.02 0.30)	7	0.04	0.03	(0.01 0.08)
									7	*0.27*	*0.17*	*(0.09 0.62)*	*8*	*0.28*	*0.19*	*(0.06 0.63)*								
Dense Connective Tissue	0				8	0.19	0.13	(0.05 0.48)	8	0.21	0.14	(0.06 0.45)	5	0.09	0.04	(0.05 0.14)	8	0.09	0.11	(0.02 0.35)	7	0.06	0.05	(0.01 0.15)
Cartilage	0				8	0.21	0.11	(0.07 0.37)	8	0.20	0.14	(0.03 0.39)	8	0.47	0.68	(0.04 2.10)	8	0.06	0.03	(0.03 0.10)	7	0.03	0.02	(0.01 0.06)
													7	*0.24*	*0.20*	*(0.04 0.50)*								
G.I.T. Stomach	6	0.03	0.02	(0.01 0.06)	9	0.14	0.11	(0.03 0.32)	8	0.18	0.14	(0.02 0.47)	9	0.13	0.09	(0.06 0.31)	8	0.05	0.02	(0.03 0.08)	7	0.05	0.03	(0.03 0.09)
G.I.T. Caecum	5	0.06	0.04	(0.01 0.10)	5	0.23	0.19	(0.05 0.55)	6	0.38	0.25	(0.10 0.75)	8	0.27	0.36	(0.03 1.10)	8	0.10	0.06	(0.02 0.19)	7	0.10	0.11	(0.04 0.33)
													7	*0.15*	*0.13*	*(0.03 0.40)*								
G.I.T. Midgut	5	0.05	0.03	(0.02 0.08)	9	0.13	0.08	(0.03 0.24)	8	0.20	0.11	(0.09 0.37)	9	0.16	0.10	(0.06 0.35)	8	0.09	0.05	(0.02 0.14)	7	0.07	0.05	(0.02 0.15)

The figures in italics exclude the highest values

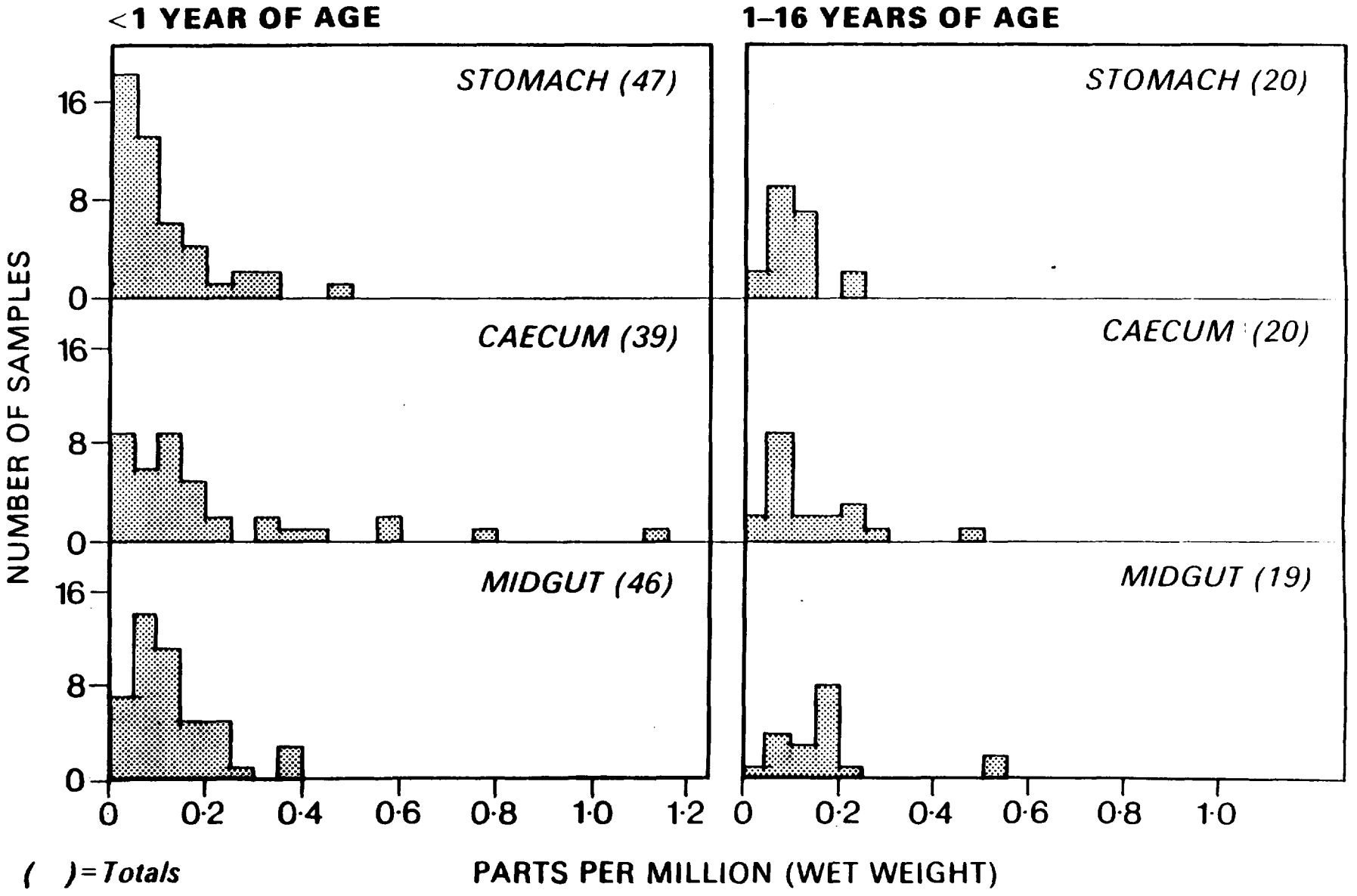
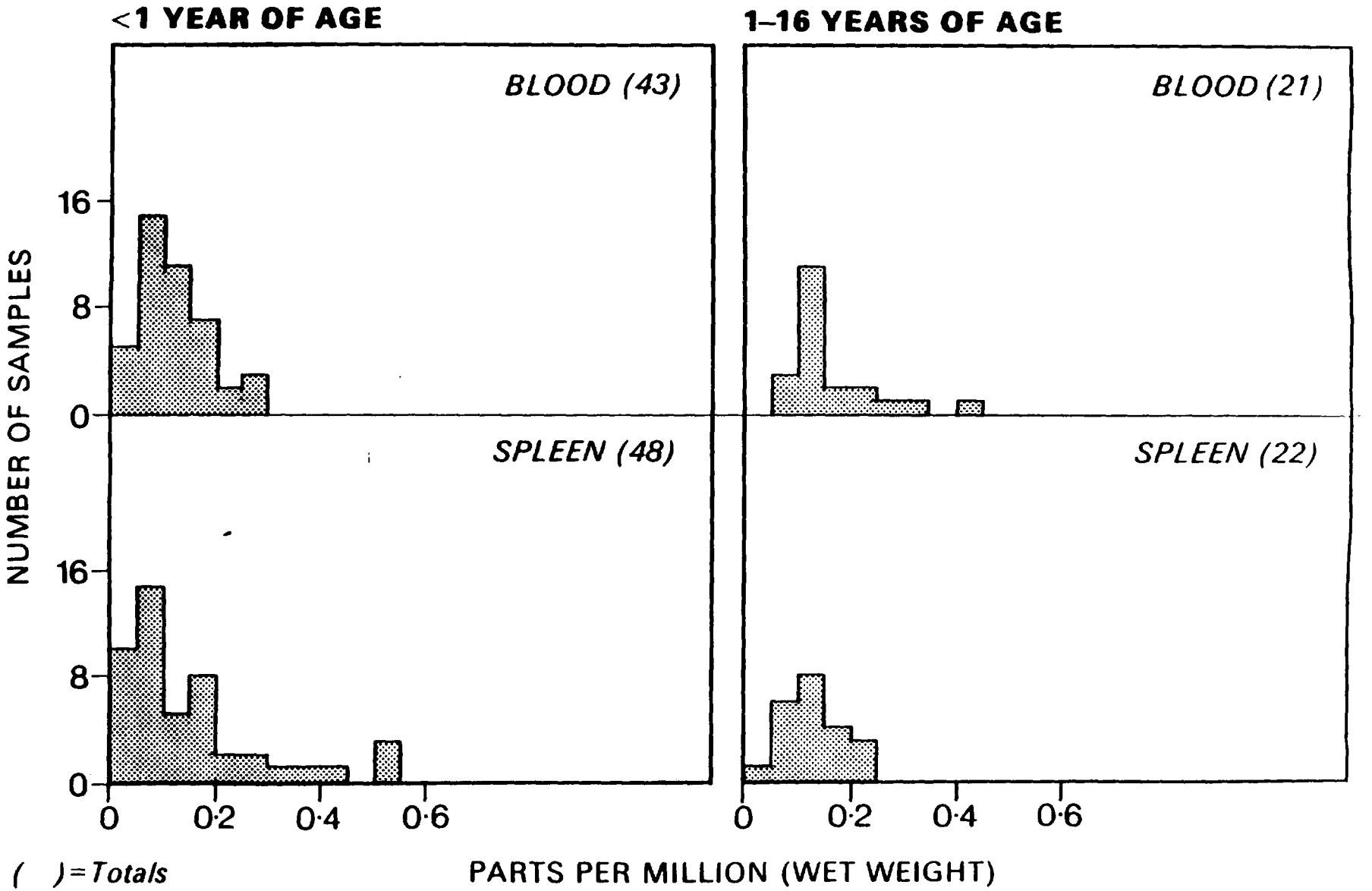
DISTRIBUTION OF RESULTS IN THE SOFT TISSUES OF CHILDREN



DISTRIBUTION OF RESULTS IN THE SOFT TISSUES OF CHILDREN



DISTRIBUTION OF RESULTS IN THE SOFT TISSUES OF CHILDREN



DISTRIBUTION OF RESULTS IN THE SOFT TISSUES OF CHILDREN