

**S5 Table – Quintiles of trace-element concentrations in toenails ( $\mu\text{g/g}$  dry mass) broken down by case versus control, age and smoking status.**

		Case/Control		Age				Smoking Status					
				<63		63+		Current		Former		Never	
		case	control	case	control	case	control	case	control	case	control	case	control
<b>As</b>	<b>10th</b>	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
	<b>25th</b>	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.01	0.02
	<b>50th</b>	0.04	0.04	0.05	0.05	0.03	0.04	0.05	0.05	0.04	0.04	0.04	0.04
	<b>75th</b>	0.06	0.07	0.09	0.08	0.05	0.06	0.07	0.10	0.06	0.06	0.04	0.07
	<b>90th</b>	0.13	0.12	0.14	0.13	0.10	0.10	0.15	0.13	0.11	0.10	0.04	0.11
<b>Cr</b>	<b>10th</b>	0.22	0.35	0.29	0.34	0.15	0.37	0.21	0.23	0.24	0.42	0.68	0.34
	<b>25th</b>	0.51	0.71	0.54	0.73	0.45	0.68	0.45	0.65	0.54	0.71	0.68	0.74
	<b>50th</b>	0.93	1.17	0.92	1.13	0.98	1.21	0.77	0.95	1.04	1.12	1.02	1.37
	<b>75th</b>	1.60	2.28	1.23	1.91	1.72	2.69	1.25	1.65	1.72	2.14	1.29	2.62
	<b>90th</b>	2.29	3.80	2.21	3.05	2.38	3.85	2.23	2.06	2.50	3.35	1.29	4.39
<b>Ni</b>	<b>10th</b>	0.16	0.11	0.27	0.12	0.07	0.11	0.23	0.11	0.10	0.14	0.43	0.08
	<b>25th</b>	0.38	0.43	0.40	0.42	0.36	0.45	0.39	0.38	0.36	0.42	0.43	0.52
	<b>50th</b>	0.70	0.89	0.69	0.79	0.71	0.96	0.57	0.62	0.77	0.95	0.82	1.03
	<b>75th</b>	1.19	1.78	1.23	1.63	1.18	1.83	1.23	1.07	1.21	1.82	1.16	1.87
	<b>90th</b>	2.37	3.01	2.47	2.48	2.03	3.43	1.89	1.84	3.90	3.01	1.16	3.43
<b>Cd</b>	<b>10th</b>	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01
	<b>25th</b>	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02
	<b>50th</b>	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.03
	<b>75th</b>	0.05	0.07	0.04	0.07	0.07	0.07	0.05	0.05	0.06	0.07	0.03	0.08
	<b>90th</b>	0.61	0.52	0.43	0.35	0.69	0.53	0.54	0.14	0.69	0.54	0.03	0.52
<b>Pb</b>	<b>10th</b>	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.01	0.00	0.01
	<b>25th</b>	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.01	0.02	0.00	0.01
	<b>50th</b>	0.04	0.04	0.05	0.04	0.03	0.04	0.04	0.07	0.03	0.05	0.01	0.03
	<b>75th</b>	0.08	0.09	0.10	0.09	0.08	0.09	0.07	0.14	0.12	0.10	0.08	0.07
	<b>90th</b>	0.20	0.18	0.16	0.15	0.32	0.23	0.15	0.19	0.32	0.22	0.08	0.16

		Case/Control		Age				Smoking Status					
				<63		63+		Current		Former		Never	
		case	control	case	control	case	control	case	control	case	control	case	control
<b>Zi</b>	<b>10th</b>	80.29	84.19	87.64	84.88	79.28	83.77	82.12	82.49	77.56	83.77	87.86	85.23
	<b>25th</b>	96.91	92.90	99.42	93.76	95.10	92.61	98.60	93.76	96.50	91.95	87.86	93.43
	<b>50th</b>	116.92	109.18	117.92	108.49	115.93	110.73	117.92	108.59	116.93	109.29	89.35	109.23
	<b>75th</b>	139.33	130.41	142.92	129.80	130.79	130.56	140.03	122.37	138.75	132.65	144.55	130.43
	<b>90th</b>	162.76	147.09	163.66	144.48	160.25	147.94	162.91	144.48	160.25	149.14	144.55	146.77
<b>U</b>	<b>10th</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>25th</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>50th</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>75th</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01
	<b>90th</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
<b>Fe</b>	<b>10th</b>	6.32	6.52	9.01	6.99	5.85	5.71	7.71	8.06	5.85	6.41	8.14	6.30
	<b>25th</b>	9.43	8.65	9.89	9.21	8.14	7.84	9.67	11.13	9.19	8.01	8.14	8.12
	<b>50th</b>	11.79	12.03	12.76	12.21	11.27	11.73	11.67	13.32	11.35	12.03	39.15	10.86
	<b>75th</b>	15.68	17.12	18.77	16.73	14.03	17.43	15.04	21.51	15.22	17.74	39.30	15.93
	<b>90th</b>	29.13	26.82	30.67	26.74	26.58	27.91	22.34	34.72	30.78	29.34	39.30	23.31
<b>Al</b>	<b>10th</b>	2.83	3.68	3.25	4.14	2.05	3.58	3.10	3.58	2.83	4.03	2.05	3.33
	<b>25th</b>	4.16	5.17	5.20	5.62	3.35	4.60	4.09	5.31	4.44	4.78	2.05	5.35
	<b>50th</b>	6.38	7.30	7.64	8.09	5.82	6.41	6.44	7.95	6.24	7.45	7.96	7.23
	<b>75th</b>	9.14	11.40	10.12	11.85	7.46	11.12	8.64	12.04	10.12	12.87	9.54	10.18
	<b>90th</b>	13.77	18.67	16.00	22.97	11.32	14.98	11.32	18.67	16.62	24.02	9.54	15.27
<b>Mn</b>	<b>10th</b>	0.10	0.13	0.11	0.13	0.09	0.11	0.11	0.13	0.09	0.12	0.11	0.13
	<b>25th</b>	0.16	0.20	0.23	0.21	0.13	0.18	0.18	0.19	0.14	0.23	0.11	0.20
	<b>50th</b>	0.27	0.32	0.31	0.31	0.24	0.33	0.28	0.31	0.27	0.34	0.32	0.31
	<b>75th</b>	0.41	0.51	0.44	0.49	0.34	0.51	0.44	0.52	0.37	0.54	0.40	0.48
	<b>90th</b>	0.63	0.92	0.67	1.01	0.51	0.86	0.54	0.93	0.73	1.01	0.40	0.76
<b>Co</b>	<b>10th</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
	<b>25th</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
	<b>50th</b>	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01	0.02
	<b>75th</b>	0.02	0.03	0.02	0.03	0.02	0.04	0.02	0.03	0.03	0.03	0.02	0.03
	<b>90th</b>	0.05	0.05	0.04	0.05	0.05	0.05	0.03	0.04	0.06	0.05	0.02	0.05

		Case/Control		Age				Smoking Status					
				<63		63+		Current		Former		Never	
		case	control	case	control	case	control	case	control	case	control	case	control
<b>Cu</b>	<b>10th</b>	2.13	2.24	2.18	2.37	2.01	2.00	2.18	1.92	2.01	2.06	2.63	2.29
	<b>25th</b>	2.57	2.72	2.61	2.84	2.55	2.61	2.58	2.46	2.49	2.67	2.63	2.81
	<b>50th</b>	3.09	3.25	3.11	3.46	3.02	3.08	3.01	3.09	3.16	3.38	3.02	3.25
	<b>75th</b>	4.00	4.11	4.02	4.20	3.98	4.00	3.75	3.93	4.12	4.15	4.63	4.12
	<b>90th</b>	5.01	5.06	4.83	5.40	5.08	4.75	4.74	6.00	5.24	5.18	4.63	5.01
<b>Se</b>	<b>10th</b>	0.67	0.74	0.68	0.74	0.67	0.73	0.68	0.69	0.67	0.74	0.94	0.75
	<b>25th</b>	0.74	0.84	0.72	0.85	0.76	0.83	0.74	0.78	0.74	0.85	0.94	0.85
	<b>50th</b>	0.90	0.94	0.86	0.93	0.91	0.95	0.87	0.86	0.90	0.97	1.06	0.97
	<b>75th</b>	1.05	1.08	1.03	1.05	1.05	1.08	1.02	0.97	1.05	1.08	1.40	1.10
	<b>90th</b>	1.17	1.26	1.18	1.22	1.16	1.27	1.19	1.06	1.16	1.25	1.40	1.28