

APPENDIX B

Useful Tables

TABLE 1.—Atomic weights, valences, and equivalent weights of certain elements

Element	Atomic weight	Valence	Equivalent weight
Sodium	23.0	1	23.0
Potassium	39.0	1	39.0
Magnesium	24.0	2	12.0
Calcium	40.0	2	20.0
Chlorine	35.5	1	35.5
Phosphorus	31.0	3	10.3
Sulfur	32.0	2	16.0

TABLE 2.—Millequivalent per gram of certain elements and compounds

Element or compound	Milli-equivalent	Element or compound	Milli-equivalent
Sodium	43.5	Potassium chloride:	
Potassium	26.0	Potassium	13.5
Magnesium	85.0	Chloride	13.5
Calcium	50.0	Sodium lactate:	
Chloride	29.0	Sodium	9.0
Sodium chloride:		Lactate	9.0
Sodium	17.0		
Chloride	17.0		

TABLE 3.—*Normal range of concentration of serum constituents*

Constituent	Concentration per 100 milliliters	Milliequivalent per liter	Millimoles per liter
Sodium milligram	310-340	135-148	135-148
Potassium milligram	13.6-20.7	3.5-5.3	3.5-5.3
Magnesium milligram	1.8-3.0	1.5-2.5	1.5-2.5
Calcium milligram	9.6-11.0	4.8-5.4	4.8-5.4
Chloride milligram	348-383	98-108	98-108
Urea nitrogen milligram	8-18		3-6.5
Carbon dioxide	101-132	23-30	23-30
Total Protein gram	6.0-8.2		
Albumin gram	3.8-5.0		
Globulin gram	2.3-3.5		

TABLE 4.—*Normal range of concentration of whole blood gases and pH value*

Constituent	Concentration torr ¹	kPa ²
pO ₂ —Arterial	75-105 torr	10-14
Venous	30 torr	4
pCO ₂ —Arterial	33-44 torr	4.5-5.9
Venous	38-49 torr	5.1-6.6
pH	7.35-7.45	

1. One torr = 1 mm Hg at sea level.

2. One Kilo Pascal (kpa) = 7.5 mm Hg = 7.5 torr.

TABLE 5.—Equivalent United States and imperial weights and measures

Unit of measurement	Abbreviation	United States measure	Imperial measure
1 milligram	mg	0.015432 grain	0.015432 grain.
1 gram	g	15.432 grains	15.432 grains.
1 kilogram	kg	{ 35.274 ounces (avoirdupois)	32.150 ounces (apothecary).
		{ 32.150 ounces (apothecary)	35.274 ounces (apothecary).
1 grain	gr	{ 0.0648 gram	0.0648 gram.
		{ 64.8 milligrams	64.8 milligrams.
480 grains	gr	31.1035 grams	31.1035 grams.
1 ounce	oz	{ 437.5 grains	437.5 grains.
		{ 28.350 grams	28.350 grams.
1 milliliter	ml	16.23 minims	16.894 minims.
1 liter	l	33.814 fluid ounces	35.196 fluid ounces.
1 minim	min	0.0616 milliliter	0.0592 milliliter.
1 fluid ounce	fl. oz.	29.573 milliliters	28.412 milliliters.
1 pint ¹	pt.	473.17 milliliters	568.25 milliliters.

¹Sixteen fluid ounces, U.S. measure; 20 fluid ounces, imperial measure.

TABLE 6.—*Approximate equivalent metric and imperial doses*

Milliliters	Minims	Grams	Grains	Milligrams	Grains
0.1	1 ½	0.1	1 ½	0.1	1/600
0.12	2	0.12	2	0.125	1/480
0.15	2 ¼	0.15	2 ¼	0.25	1/240
0.2	3	0.2	3	0.3	1/200
0.25	4	0.25	4	0.5	1/120
0.3	5	0.3	5	0.6	1/100
0.4	6	0.4	6	1	1/60
0.5	8	0.5	8	1.5	1/40
0.6	10	0.6	10	2	1/30
1	15	1	15	2.5	1/24
1.3	20	1.3	20	3	1/20
2	30	2	30	5	1/12
3	45	3	45	8	1/8
4	60	4	60	9	3/20
5	75	5	75	10	1/6
6	90	6	90	12	1/5
8	120	8	120	16	1/4
10	150	10	150	20	1/3
15	225	15	225	25	2/5
20	300	20	300	30	1/2
25	375	25	375	50	3/4
				60	1
				75	1 ¼

TABLE 7.—*Equivalent avoirdupois and metric weights*

Pounds	Kilograms	Pounds	Kilograms
100	45.359	155	70.306
105	47.627	160	72.574
110	49.895	165	74.842
115	52.163	170	77.110
120	54.431	175	79.378
125	56.698	180	81.646
130	58.966	185	83.914
135	61.234	190	86.182
140	63.502	195	88.450
145	65.770	200	90.718
150	68.038		

TABLE 8.—*Equivalents of centigrade and Fahrenheit thermometric scales*

Degrees C	Degrees F	Degrees C	Degrees F	Degrees C	Degrees F
-10	14.0	31	87.8	72	161.6
-9	15.8	32	89.6	73	163.4
-8	17.6	33	91.4	74	165.2
-7	19.4	34	93.2	75	167.0
-6	21.2	35	95.0	76	168.8
-5	23.0	36	96.8	77	170.6
-4	24.8	37	98.6	78	172.4
-3	26.6	38	100.4	79	174.2
-2	28.4	39	102.2	80	176.0
-1	30.2	40	104.0	81	177.8
0	32.0	41	105.8	82	179.6
1	33.8	42	107.6	83	181.4
2	35.6	43	109.4	84	183.2
3	37.4	44	111.2	85	185.0
4	39.2	45	113.0	86	186.8
5	41.0	46	114.8	87	188.6
6	42.8	47	116.6	88	190.4
7	44.6	48	118.4	89	192.2
8	46.4	49	120.2	90	194.0
9	48.2	50	122.0	91	195.8
10	50.0	51	123.8	92	197.6
11	51.8	52	125.6	93	199.4
12	53.6	53	127.4	94	201.2
13	55.4	54	129.2	95	203.0
14	57.2	55	131.0	96	204.8
15	59.0	56	132.8	97	206.6
16	60.8	57	134.6	98	208.4
17	62.6	58	136.4	99	210.2
18	64.4	59	138.2	100	212.0
19	66.2	60	140.0	101	213.8
20	68.0	61	141.8	102	215.6
21	69.8	62	143.6	103	217.4
22	71.6	63	145.4	104	219.2
23	73.4	64	147.2	105	221.0
24	75.2	65	149.0	106	222.8
25	77.0	66	150.8	107	224.6
26	78.8	67	152.6	108	226.4
27	80.6	68	154.4	109	228.2
28	82.4	69	156.2	110	230.0
29	84.2	70	158.0		
30	86.0	71	159.8		

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