

IX. METABOLIC END PRODUCTS

102. EXCRETION PRODUCTS IN FECES: MAN

Values are based on "normal" dietary intake, including approximately 10 g nitrogen/day. In reducing values to mg/kg or $\mu\text{g}/\text{kg}$, a body weight of 70 kg was assumed, unless spe-

cific weight was reported in the literature. Values in parentheses are ranges, estimate "c" (see Introduction).

General Chemical Constituents, mg			Amount Excreted per kg body wt per day			Reference		
Constituent (Synonym)	Amount Excreted per kg body wt per day	Reference	Constituent (Synonym)	Amount Excreted per kg body wt per day	Reference			
General Chemical Constituents, mg			34	Neutral	(10-45)	15		
1 Solids	394(140-560)	46	35	Unsataponifiable	33(22-38) ^{1/}	45		
2 Water	(910-1820)	40	36	Fatty acids, total	(41-92)	3,18,25		
Electrolytes, mg			37	linoleic	(1.6-3.6)	18		
3 Aluminum	0.0006	26	38	oleic	(5-11)	18		
4 Arsenic	0.033(0.001-0.116)	36	39	palmitic	(13-30)	18		
5 Calcium	(5-10)	16,38	40	stearic	(14-33)	18		
6 Chlorine	(0.21-0.50)	4	41	Soaps, total	53(40-66) ^{1/}	45		
7 Cobalt	(0.000002-0.000020)	20	42	<i>n</i> -dodecanoic	0.3 ^{2/}	34		
8 Copper	0.027(0.023-0.037)	26	43	<i>n</i> -tetradecanoic	1.9 ^{2/}	34		
9 Iron	120(65-208)	9	44	<i>n</i> -pentadecanoic	0.4 ^{2/}	34		
10 Lead	0.0042	26	45	<i>n</i> -hexadecanoic	38.8 ^{2/}	34		
11 Magnesium	2.5(1.510-3.185)	29	46	<i>n</i> -heptadecanoic	1.3 ^{2/}	34		
12 Manganese	(0.018-0.120)	26,27	47	<i>n</i> -octadecanoic	49.2 ^{2/}	34		
13 Mercury	0.00014	39	48	$\Delta^{9,10}$ -hexadecanoic	1.1 ^{2/}	34		
14 Nickel	(0.0012-0.0025)	27	49	$\Delta^{9,10}$ -octadecanoic	7.0 ^{2/}	34		
15 Phosphorus, total	0.00986(0.00710-0.02000)	9	Neutral steroids					
16 Potassium	6.7	7	50	Total	(9-14)	2,12		
17 Silver	0.0008	26	51	Campesterol (24 α -Methylcholest-5-en-3 β -ol)	0.6	12		
18 Sodium	1.7	7	52	Cholesterol (cholest-5-en-3 α -ol)	1.4	12		
19 Sulfur, total	2.0	7	53	Coprostanol (5 β -cholestan-3 β -ol)	6	12		
20 Tin	(0.17-0.45)	7,26	54	Coprostanone (5 β -cholestan-3-one)	0.6	12		
21 Zinc	0.100(0.058-0.144)	41	55	β -Sitosterol (24 β -ethylcholest-5-en-3 β -ol)	0.6	12		
Vitamins & Related Compounds, μg			56	Stigmasterol (24 β -ethylcholest-5,22-dien-3 β -ol)	2	12		
22 Thiamine	7.80(0.67-18.00)	10	57	Hydrocarbons	3.9(1.4-5.6)	2		
23 Riboflavin	14.7(8.0-23.0)	10	58	Mono- & di-glycerides	1.2(0.4-1.7)	2		
24 Nicotinic acid	52(12-124)	10	59	Triglycerides	3.9(1.4-5.6)	2		
25 Biotin	1.90(0.63-6.64)	10	60	Long-chain alcohols	1.9(0.7-2.6)	2		
26 Pantothenic acid	31.40(3.85-63.40)	10	61	Long-chain esters	1.9(0.7-2.6)	2		
27 Folic acid	4.3(1.8-7.7)	10	62	Phospholipids	2.3(0.8-3.4)	2		
28 <i>p</i> -Aminobenzoic acid	3.50(1.01-8.20)	10	63	Bile acids, total	3.9(1.4-5.6)	3		
29 Ascorbic acid	(60-70)	6	64	individual ^{2/}	Trace	5,8,11,13,19,23,24,32		
30 Vitamin E	308(226-391)	28	65	Phenol, total	(0-3)	14		
31 Xanthophyll	(8-100)	42						
32 Xanthophyll + carotene	(20-600)	42						
Lipids & Miscellaneous Organic Acids, mg								
33 Fats, total	56(30-100)	46						

^{1/} At 8-12 years old. ^{2/} Expressed as % of total fatty acids. ^{3/} Includes lithocholic; 3 β -hydroxy-5 β -cholanoic; chenodeoxycholic; 3 α ,7 α -dihydroxy-5 β -cholanoic; 3 α ,7 β -dihydroxy-5 β -cholanoic; 3 β ,7 α -dihydroxy-5 β -cholanoic; deoxycholic; 3 α ,12 β -dihydroxy-5 β -cholanoic; 3 β ,12 α -dihydroxy-5 β -cholanoic; 3 β ,12 β -dihydroxy-5 β -cholanoic; cholic; 3 α ,7 α ,12 α -trihydroxy-5 α -cholanoic; 3 α ,7 β ,12 α -trihydroxy-5 β -cholanoic;

3 β ,7 α ,12 α -trihydroxy-cholanoic; 3 β ,7 β ,12 α -trihydroxy-cholanoic; 3-keto-5 β -cholanoic; 3,12-diketo-5 β -cholanoic; 3-keto-7 α -hydroxy-5 β -cholanoic; 3-keto-12 α -hydroxy-5 β -cholanoic; 3 α -hydroxy-7-keto-5 β -cholanoic; 3 α -hydroxy-12-keto-5 β -cholanoic; 3 β -hydroxy-12-keto-5 β -cholanoic; 3 α ,7 α -dihydroxy-12-keto-5 β -cholanoic; and 3 α ,12 α -dihydroxy-7-keto-5 β -cholanoic acids.

102. EXCRETION PRODUCTS IN FECES: MAN

Constituent (Synonym)		Amount Excreted per kg body wt per day	Reference	Constituent (Synonym)		Amount Excreted per kg body wt per day	Reference
Nitrogenous Substances, mg				74	histidine, total	1.7(1.4-2.1)	37
				75	isoleucine, total	4.3(3.3-5.5)	37
66	Imidazole derivatives	(0-0.2)	30	76	leucine, total	5.6(4.3-6.9)	37
				77	lysine, total	5.7(4.5-6.9)	37
67	Bilirubin	0.14	44	78	threonine, total	4.0(3.3-5.2)	37
68	Coproporphyrin	(0.005-0.014)	35	79	valine, total	4.6(3.6-6.2)	37
69	Protoporphyrin	0.014	17	80	Nitrogen, total	(11.4-36.0)	21
70	Urobilinogen + sterco-bilinogen	2	43,44	81	ammonia	(0.36-1.2)	33
				Enzymes			
71	Uroporphyrin	(0.00014-0.00060)	35	82	Chymotrypsin	Consult references	1,22
72	Purine bases	(2-3)	31	83	Trypsin	references	1,22
73	Amino acids, arginine, total	3.8(2.9-5.0)	37				

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