

Annex IV: Recommended Dietary Allowances^a, Revised 1989

Category	Age (years) or Condition	Weight ^a Height ^b				Fat-Soluble Vitamins					Water-Soluble Vitamins					Minerals								
		Weight ^a (kg) (lb)	Height ^b (cm) (in)	Protein (g)	Vita- min A (IU) ^c	Vita- min D (IU) ^d	Vita- min E (mg ∞-TE) ^e	Vita- min K (µg)	Vita- min C (mg)	Thia- min (mg)	Ribo- flavin (mg)	Niacin (mg NE) ^f	Vita- min B ₆ (mg)	Fo- late (µg)	Vitamin B ₁₂ (µg)	Cal- cium (mg)	Phos- phorus (mg)	Mag- nesium (mg)	Iron (mg)	Zinc (mg)	Iodine (µg)	Sele- nium (µg)		
Infants	0.0-0.5	6	13	60	24	13	1,249	300	3	5	30	0.3	0.4	5	0.3	25	0.3	400	300	40	6	5	40	10
	0.5-1.0	9	20	71	28	14	1,249	400	4	10	35	0.4	0.5	6	0.6	35	0.5	600	500	60	10	5	50	15
Children	1-3	13	29	90	35	16	1,332	400	6	15	40	0.7	0.8	9	1.0	50	0.7	800	800	80	10	10	70	20
	4-6	20	44	112	44	24	1,665	400	7	20	45	0.9	1.1	12	1.1	75	1.0	800	800	120	10	10	90	20
	7-10	28	62	132	52	28	2,331	400	7	30	45	1.0	1.2	13	1.4	100	1.4	800	800	170	10	10	120	30
Males	11-14	45	99	157	62	45	3,330	400	10	45	50	1.3	1.5	17	1.7	150	2.0	1,200	1,200	270	12	15	150	40
	15-18	66	145	176	69	59	3,330	400	10	65	60	1.5	1.8	20	2.0	200	2.0	1,200	1,200	400	12	15	150	50
	19-24	72	160	177	70	58	3,330	400	10	70	60	1.5	1.7	19	2.0	200	2.0	1,200	1,200	350	10	15	150	70
	25-50	79	174	176	70	63	3,330	200	10	80	60	1.5	1.7	19	2.0	200	2.0	800	800	350	10	15	150	70
	51 +	77	170	173	68	63	3,330	200	10	80	60	1.2	1.4	15	2.0	200	2.0	800	800	350	10	15	150	70
Females	11-14	46	101	157	62	46	2,664	400	8	45	50	1.1	1.3	15	1.4	150	2.0	1,200	1,200	280	15	12	150	45
	15-18	55	120	163	64	44	2,664	400	8	55	60	1.1	1.3	15	1.5	180	2.0	1,200	1,200	300	15	12	150	50
	19-24	58	128	164	65	46	2,664	400	8	60	60	1.1	1.3	15	1.6	180	2.0	1,200	1,200	280	15	12	150	55
	25-50	63	138	163	64	50	2,664	200	8	65	60	1.1	1.3	15	1.6	180	2.0	800	800	280	15	12	150	55
	51 +	65	143	160	63	50	2,664	200	8	65	60	1.0	1.2	13	1.6	180	2.0	800	800	280	10	12	150	55
Pregnant					60	2,664	400	10	65	70	1.5	1.6	17	2.2	400	2.2	1,200	1,200	320	30	15	175	65	
Lactating	1 st 6 months					65	4,329	400	12	65	95	1.6	1.8	20	2.1	280	2.6	1,200	1,200	355	15	19	200	75
	2 nd 6 months					62	3,996	400	11	65	90	1.6	1.7	20	2.1	260	2.6	1,200	1,200	340	15	16	200	75

^a The allowances, expressed as average daily intakes over time, are intended to provide for individual variations among most normal persons as they live in the United States under usual environmental stresses. Diets should be based on a variety of common foods in order to provide other nutrients for which human requirements have been less well defined. See text for detailed discussion of allowances and of nutrients not tabulated.

^b Weights and heights of Reference Adults are actual medians for the U.S. population of the designated age, as reported by National Health and Nutrition Examination Survey (II), 1979. The median weights and heights of those under 19 years of age were taken from Hamill et al. (1979). The use of these figures does not imply that the height-to-weight ratios are ideal.

^c Conversion of IU to retinol equivalents (RE): 3.33 IU = 1 microgram (µg) of retinol = 1 RE or 6 µg, β-carotene.

^d As cholecalciferol. 10 µg cholecalciferol = 400 IU of vitamin D.

^e ∞-Tocopherol equivalents. 1 mg d-∞ tocopherol = 1 ∞-TE.

^f 1NE (niacin equivalent) is equal to 1 mg of niacin or 60 mg of dietary tryptophan.

(Source: Adapted from *Recommended Dietary Allowances*, National Research Council, National Academy Press, Washington, D.C. 1989)