

## Chapter HFS 132

### APPENDIX A

#### FOOD AND NUTRITION BOARD. NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL RECOMMENDED DAILY DIETARY ALLOWANCES. <sup>a</sup> Revised 1980

*Designed for the maintenance of good nutrition of practically all healthy people in the U.S.A.*

	Age (years)	Weight		Height		Protein (g)	Fat-Soluble Vitamins		
		(kg)	(lb)	(cm)	(in)		Vitamin A (µg RE <sup>b</sup> )	Vitamin D (µg) <sup>c</sup>	Vitamin E (mg α-TE) <sup>d</sup>
		Infants	0.0–0.5	6	13		60	24	kgx2.2
	0.5–1.0	9	20	71	28	kgx2.0	400	10	4
Children	1–3	13	29	90	35	23	400	10	5
	4–6	20	44	112	44	30	500	10	6
	7–10	28	62	132	52	34	700	10	7
Males	11–14	45	99	157	62	45	1000	10	8
	15–18	66	145	176	69	56	1000	10	10
	19–22	70	154	177	70	56	1000	7.5	10
	23–50	70	154	178	70	56	1000	5	10
	51+	70	154	178	70	56	1000	5	10
Females	11–14	46	101	157	62	46	800	10	8
	15–18	55	120	163	64	46	800	10	8
	19–22	55	120	163	64	44	800	7.5	8
	23–50	55	120	163	64	44	800	5	8
	51+	55	120	163	64	44	800	5	8
Pregnant						+30	+200	+5	+2
Lactating						+20	+400	+5	+3

	Age (years)	Weight		Height		Water-Soluble Vitamins						
		(kg)	(lb)	(cm)	(in)	Vitamin C (mg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg NE) <sup>e</sup>	Vitamin B-6 (mg)	Folacin <sup>f</sup> (µg)	Vitamin B-12 (µg)
		Infants	0.0–0.5	6	13	60	24	35	0.3	0.4	6	0.3
	0.5–1.0	9	20	71	28	35	0.5	0.6	8	0.6	45	1.5
Children	1–3	13	29	90	35	45	0.7	0.8	9	0.9	100	2.0
	4–6	20	44	112	44	45	0.9	1.0	11	1.3	200	2.5
	7–10	28	62	132	52	45	1.2	1.4	16	1.6	300	3.0
Males	11–14	45	99	157	62	50	1.4	1.6	18	1.8	400	3.0
	15–18	66	145	176	69	60	1.4	1.7	18	2.0	400	3.0
	19–22	70	154	177	70	60	1.5	1.7	19	2.2	400	3.0
	23–50	70	154	178	70	60	1.4	1.6	18	2.2	400	3.0
	51+	70	154	178	70	60	1.2	1.4	16	2.2	400	3.0
Females	11–14	46	101	157	62	50	1.1	1.3	15	1.8	400	3.0
	15–18	55	120	163	64	60	1.1	1.3	14	2.0	400	3.0
	19–22	55	120	163	64	60	1.1	1.3	14	2.0	400	3.0
	23–50	55	120	163	64	60	1.0	1.2	13	2.0	400	3.0
	51+	55	120	163	64	60	1.0	1.2	13	2.0	400	3.0
Pregnant						+20	+0.4	+0.3	+2	+0.6	+400	+1.0
Lactating						+40	+0.5	+0.5	+5	+0.5	+100	+1.0

	Age (years)	Weight		Height		Minerals					
		(kg)	(lb)	(cm)	(in)	Calcium (mg)	Phosphorus (mg)	Magnesium (mg)	Iron (mg)	Zinc (mg)	Iodine (µg)
Infants	0.0-0.5	6	13	60	24	360	240	50	10	3	40
	0.5-1.0	9	20	71	28	540	360	70	15	5	50
Children	1-3	13	29	90	35	800	800	150	15	10	70
	4-6	20	44	112	44	800	800	200	10	10	90
	7-10	28	62	132	52	800	800	250	10	10	120
Males	11-14	45	99	157	62	1200	1200	350	18	15	150
	15-18	66	145	176	69	1200	1200	400	18	15	150
	19-22	70	154	177	70	800	800	350	10	15	150
	23-50	70	154	178	70	800	800	350	10	15	150
	51+	70	154	178	70	800	800	350	10	15	150
Females	11-14	46	101	157	62	1200	1200	300	18	15	150
	15-18	55	120	163	64	1200	1200	300	18	15	150
	19-22	55	120	163	64	800	800	300	18	15	150
	23-50	55	120	163	64	800	800	300	18	15	150
	51+	55	120	163	64	800	800	300	10	15	150
Pregnant						+400	+400	+150	h	+5	+25
Lactating						+400	+400	+150	h	+10	+50

<sup>a</sup>The allowances 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.

<sup>b</sup> Retinol equivalents. 1 retinol equivalent = 1µg retinol or 6µg carotene. See text for calculation of vitamin A activity of diets as retinol equivalents.

<sup>c</sup> As cholecalciferol. 10µg cholecalciferol = 400 IU of vitamin D.

<sup>d</sup> α-tocopherol equivalents. 1 mg d-α tocopherol = 1 α-TE.

<sup>e</sup> 1 NE (niacin equivalent) is equal to 1 mg of niacin or 60 mg of dietary tryptophan.

<sup>f</sup> The folacin allowances refer to dietary sources as determined by *Lactobacillus casei* assay after treatment with enzymes (conjugases) to make polyglutamyl forms of the vitamin available to the test organism.

<sup>g</sup> The recommended dietary allowance for vitamin B-12 in infants is based on average concentration of the vitamin in human milk. The allowances after weaning are based on energy intake (as recommended by the American Academy of Pediatrics) and consideration of other factors, such as intestinal absorption.

<sup>h</sup> The increased requirements during pregnancy cannot be met by the iron content of habitual American diets nor by the existing iron stores of many women: therefore the use of 30-60 mg of supplemental iron is recommended. Iron needs during lactation are not substantially different from those of nonpregnant women, but continued supplementation of the mother for 2-3 months after parturition is advisable in order to replenish stores depleted by pregnancy.