**Table 1: Dietary Reference Intakes for Older Adults** 

		Eleme	nts and Ma	acronutrien	its				
	Iron	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Selenium	Vanadium	Zinc
<b>RDA</b> or Al <sup>1</sup>	(mg)	(mg) <sup>m</sup>	(mg)	(mg)	(mg)	(mg)	(ug)	(mg) <sup>n</sup>	(mg)
Age 51-70 Male	8	420	2.3*	45	ND	700	55	ND	11
Female	8	320	1.8*	45	ND	700	55	ND	8
Age 70+ Male	8	420	2.3*	45	ND	700	55	ND	11
Female	8	320	1.8*	45	ND	700	55	ND	8
Tolerable Upper Intake Levels <sup>a</sup>									
Age 51-70 Male	45	350	11	2000	1	4000	400	1.8	40
Female	45	350	11	2000	1	4000	400	1.8	40
Age 70+ Male	45	350	11	2000	1	3000	400	1.8	40
Female	45	350	11	2000	1	3000	400	1.8	40
			Carbohy-	Total			Total	Drinking wate	r Povorago
	Energy <sup>2</sup>	Protein <sup>3</sup>	drates 4	Fat <sup>5,6</sup>	n-6 PUFA	n-3 PUFA	Fiber		in food
<b>RDA</b> or Al <sup>1</sup>	(Kcal)	(gm)	(gm)	(% Kcal)	(gm)	(gm)	(gm)	(L)	
Age 51-70 Male	2204	56	130		14*	1.6*	30*		7*
Female	1978	46	130		11*	1.1*	21*	2.	7*
Age 70+ Male	2054	56	130		14*	1.6*	30*	2.	6*
Female	1873	46	130		11*	1.1*	21*	2.	1*
AMDR <sup>7</sup>		10-35%	45-65%	20-35%	5-10%	0.6-1.2%			

<sup>&</sup>lt;sup>1</sup> Recommended Dietary Allowances (RDAs) are in **bold type** and Adequate Intakes (Als) are in ordinary type followed by an asterisk (\*).

The values for this table were excerpted from the Institute of Medicine, *Dietary Reference Intakes: Applications in Dietary Assessment*, 2000 and *Dietary Reference Intakes for Energy, Carbohydrates, Fiber, Fat, Protein and Amino Acids (Macronutrients)* 2002.

<sup>&</sup>lt;sup>2</sup> Values are based on Table 5-22 Estimated Energy Requirements (EER) for Men and Women 30 Years of Age. Used height of 5'7", " low active" physical activity level (PAL) and calculated the median BMI and calorie level for men and women. Caloric values based on age were calculated by substracting 10 kcal/day for males (from 2504 kcal) and 7 kcal/day for females (from 2188 kcal) for each year of age above 30. For ages 51-70, calculated for 60 years old, for 70+, calculated for 75 years old. 80 year old male calculated to require 2004 kcal, female, 1838 kcal.

 $<sup>^3</sup>$  The RDA for protein equilibrium in adults is a minimum of 0.8 gm/kg body weight for reference body weight.

<sup>&</sup>lt;sup>4</sup> The RDA for carbohydrate is the minimum adeqaute to maintain brain function in adults.

<sup>&</sup>lt;sup>5</sup> Because % of energy consumed as fat can vary greatly and still meet energy needs, an AMDR is provided in absence of AI, EAR, or RDA for adults.

<sup>&</sup>lt;sup>6</sup> Values for mono- and saturated fats and cholesterol not established as "they have no role in preventing chronic disease, thus not required in the diet."

Acceptable Macronutrient Distribution Ranges (AMDRs) for intakes of carbohydrates, proteins, and fats expressed as % of total calories.

**Table 1: Dietary Reference Intakes for Older Adults** 

Vitamins and Elements											
		Vitamin A (ug) <sup>b,c</sup>	Vitamin C (mg)	Vitamin D (ug) <sup>d,e</sup>	Vitamin E (mg) <sup>f,g,h</sup>	Vitamin K (ug)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg) <sup>h,i</sup>	Vitamin B <sub>6</sub> (mg)	Folate (ug) <sup>h,j</sup>
<b>RDA</b> or A	I 1										
Age 51-70 Male		900	90	10*	15	120*	1.2	1.3	16	1.7	400
	Female	700	75	10*	15	90*	1.1	1.1	14	1.5	400
Age 70+	Male	900	90	15*	15	120*	1.2	1.3	16	1.7	400
	Female	700	75	15*	15	90*	1.1	1.1	14	1.5	400
Tolerable	Upper Intake Levels <sup>a</sup>										
Age 51-70	) Male	3000	2000	50	1000	ND	ND	ND	35	100	1000
	Female	3000	2000	50	1000	ND	ND	ND	35	100	1000
Age 70+	Male	3000	2000	50	1000	ND	ND	ND	35	100	1000
	Female	3000	2000	50	1000	ND	ND	ND	35	100	1000
			1		•	•		ı		,	
		Vitamin B <sub>12</sub>	Pantothenic	Biotin	Choline	Boron	Calcium	Chromium	Copper	Fluoride	lodine
		(ug) <sup>k</sup>	Acid (mg)	(ug)	(mg) <sup>l</sup>	(mg)	(mg)	(ug)	(ug)	(mg)	(ug)
RDA or A	I <sup>1</sup>										
Age 51-70	) Male	2.4	5*	30*	550*	ND	1200*	30*	900	4*	150
	Female	2.4	5*	30*	425*	ND	1200*	20*	900	3*	150
Age 70+	Male	2.4	5*	30*	550*	ND	1200*	30*	900	4*	150
	Female	2.4	5*	30*	425*	ND	1200*	20*	900	3*	150
Tolerable	Upper Intake Levels <sup>a</sup>										
Age 51-70 Male		ND	ND	ND	3500	20	2500	ND	10000	10	1100
	Female	ND	ND	ND	3500	20	2500	ND	10000	10	1100
Age 70+	Male	ND	ND	ND	3500	20	2500	ND	10000	10	1100
	Female	ND	ND	ND	3500	20	2500	ND	10000	10	1100

<sup>&</sup>lt;sup>1</sup> Recommended Dietary Allowances (RDAs) are in **bold type** and Adequate Intakes (Als) are in ordinary type followed by an asterisk (\*). ND - Indicates values not determined.

The values for this table were excerpted from the Institute of Medicine, *Dietary Reference Intakes: Applications in Dietary Assessment*, 2000 and *Dietary Reference Intakes for Energy, Carbohydrates, Fiber, Fat, Protein and Amino Acids (Macronutrients)* 2002.

**Table 1: Dietary Reference Intakes for Older Adults** 

## Electrolytes

		Potassium	Sodium	Chloride	
		(gm)	(mg)	(mg)	
RDA or Al	1				
Age 51-70 Male		4.7	1.3*	2.0*	
	Female	4.7	1.3*	2.0*	
Age 70+	Male	4.7	1.2*	1.8*	
	Female	4.7	1.2*	1.8*	
Tolerable	Upper Intake Levels <sup>a</sup>				
Age 51-70	Male		2.3	3.6	
	Female		2.3	3.6	
Age 70+	Male		2.3	3.6	
	Female		2.3	3.6	

<sup>&</sup>lt;sup>1</sup> Recommended Dietary Allowances (RDAs) are in **bold type** and Adequate Intakes (Als) are in ordinary type followed by an asterisk (\*). ND - Indicates values not determined.

The values for this table were excerpted from the Institute of Medicine, Dietary Reference Intakes: Water, Potassium, Sodium, Chloride, and Sulfate, 2004.

## **Table 1: Dietary Reference Intakes for Older Adults**

NOTE: This table (taken from the DRI reports, see <a href="www.nap.edu">www.nap.edu</a>) presents the Recommended Dietary Allowances (RDAs) in bold type and Adequate Intakes (Als) in ordinary type followed by an asterisk (\*). RDAs and Als may both be used as goals for individual intake. RDAs are set to meet the needs of almost all (97 to 98 percent) individuals in a group. The Al for life stage and gender groups (other than healthy, breastfed infants) is believed to cover needs of all individuals in the group, but lack of data or uncertainty in the data prevent being able to specify with confidence the percentage of individuals covered by this intake.

## **Footnotes**

- <sup>a</sup> UL = The maximum level of daily nutrient intake that is likely to pose no risk of adverse effects. Unless otherwise specified, the UL represents total intake from food, water, and supplements. Due to lack of suitable data, ULs could not be established for Vitamin K,
- <sup>b</sup> As retinal activity equivalents (RAEs). 1 RAE = 1  $\mu$ g retinal, 12  $\mu$ g  $\beta$ -carotene, or 24  $\mu$ g  $\beta$ -cryptoxanthin. To calculate RAEs from the REs of provitamin A carotenoids in foods, divide the REs by 2. For preformed vitamin A in foods or supplements and for provitamin A carotenoids in supplements, 1 RE = 1 RAE.
- <sup>c</sup> ULs As preformed vitamin A only.
- <sup>d</sup> cholecalciferol. 1 μg cholecalciferol = 40 IU vitamin D.
- <sup>e</sup> In the absence of adequate exposure to sunlight.
- <sup>f</sup> as  $\alpha$ -tocopherol.  $\alpha$ -Tocopherol includes RRR- $\alpha$ -tocopherol, the only form of  $\alpha$ -tocopherol that occurs naturally in foods, and the 2R-steroisomeric forms of  $\alpha$ -tocopherol (RRR-, RSR-, RRS-, and RSS- $\alpha$ -tocopherol) that occur in fortified foods and supplements. It does not include the 2S-stereoisomeric forms of  $\alpha$ -tocopherol (SRR-, SSR-, SSS- $\alpha$ -tocopherol), also found in fortified foods and <sup>9</sup> ULs as  $\alpha$ -tocopherol; applies to any form of supplemental  $\alpha$ -tocopherol.
- <sup>h</sup> The ULs for vitamin E, niacin, and folate apply to synthetic forms obtained from supplements, fortified foods, or a combination of the <sup>i</sup> As niacin equivalents (NE). 1 mg of niacin = 60 mg of tryptophan: 0-6 months = preformed niacin (not NE).
- As dietary folate equivalents (DFE). 1 DFE = 1  $\mu$ g food folate = 0.6  $\mu$ g of folic acid from fortified food or as a supplement consumed with food = 0.5  $\mu$ g of a supplement taken on an empty stomach.
- <sup>k</sup> Because 10 to 30 percent of older people may malabsorb food-bound  $B_{12}$ , it is advisable for those older than 50 years to meet their RDA mainly by consuming foods fortified with  $B_{12}$  or a supplement containing  $B_{12}$ .
- I Although Als have been set for choline, there are few data to assess whether a dietary supply of choline is needed at all stages of the life cycle, and it may be that the choline requirement can be met by endogenous synthesis at some of these stages.
- <sup>m</sup> The ULs for magnesium represent intake from a pharmacological agent only and do not include intake from food and water.
- <sup>n</sup> Although vanadium in food has not been shown to cause adverse effects in humans, there is no justification for adding vanadium to food and vanadium supplements should be used with caution. The UL is based on adverse effects in laboratory animals and this data could be used to set a UL for adults but not children and adolescents.