



The Suggested Optimal Daily Nutritional Allowances (SONA)

Since the 1940's researchers and the government have been developing guidelines for micronutrient intakes needed to maintain health of most people. In your readings, you'll find information about the Recommended Dietary Allowances (RDA). In 1994 the USDA implemented a new system termed the Dietary Reference Intakes (DRI) that is a general term for a set of reference values used to assess nutrient intakes of healthy people. These values include RDA, adequate intakes (AI), Tolerable Upper Intake Levels (UL) and estimated average requirements (EAR). While the RDA's and AI's of the DRI's are useful for preventing malnutrition, they do not address optimal nutritional intakes. Current research indicates that increased levels of nutrients above the current DRI level may be necessary for prevention of disease. The DRI's are population based, which means that they don't take an individual's biochemical individuality into account. There is no variability for high nutrient demands such as in illness, chronic stress, high level of exercise, cigarette smoking, alcoholism, restrictive dieting, environmental toxic exposure, medications, altitude or climate where you live, etc. The DRI's also do not correlate with levels of nutrients found in food. For example, if you eat 100 grams (3.5 oz) of oysters you'll get between 37.9 to 182 mg of zinc (344% -1654% of the DRI's.). In other words, you will obtain nearly 3-16 days of the recommended amount of zinc in just one serving of oysters. On the other hand, it is difficult to obtain the daily recommended intake of vitamin D from our food although it is obtained from a normal amount of daily exposure to sun.

The work of Roger Williams first alerted us to the wide discrepancies in nutritional needs from person to person. He details this in his book, *Biochemical Individuality*.(Williams, 1956, 1998). Since then, researchers have been researching what optimum nutritional requirements might be. Emanuel Cheraskin, MD, DMD and William M. Ringsdorf DMD, at the University of Alabama School of Medicine completed a 15 year study to determine optimal nutritional intake levels. (Cheraskin, 2005; Schauss, 2006) Over the 15-year study, these two pioneering nutrition researchers conducted comprehensive health evaluations (health status questionnaires, physical exams, laboratory measures, and cardiac function and blood sugar regulation tests) and collected nutrient intake data on 13,500 male and female adults living in six regions of the United States. The data from their \$2 million study were recorded in 49,000 bound pages in 153 volumes and resulted in the publication of over 100 research articles which were published in the late 1970's-



early 1980's. Using all this data, Cheraskin and Ringsdorf correlated the intake of specific nutrients with health status and tried to find a truly ideal level of intake for each nutrient. They reported that the healthiest people, those who had the fewest signs and symptoms, were those who had eaten a diet that was nutritionally dense in micronutrients relative to their total caloric intake.

Alexander Schauss, PhD, FACN, a nutrition researcher and former professor at the National College of Naturopathic Medicine and professor and Director of Research at Southwest College of Naturopathic Medicine, has also put together optimal suggested daily intakes (SONA's). These are detailed in *The Textbook of Natural Medicine*

The tables below list the DRI's either as RDA's or AI's and the SONA values.

Table 1

The Dietary Reference Intakes (DRI) and Suggested Optimal Daily Nutritional Allowances (SONA)

These include nutrients from all sources: food and supplements

----- MEN -----

----- WOMEN -----

Fat-soluble vitamins

Nutrient	DRI (RDA/AI*)	SONA	DRI (RDA/AI*)	SONA
Vitamin A (IU/day)	3000	6660	2333	6660
Beta-carotene (mg/day)	N/A	100	N/A	80
Vitamin D (IU/day)	600	480-880	600	480-880
Vitamin E (IU/day)	22.4 d-form	400-800	15 d-form	400-800
Vitamin K (mcg/day)	120*	120	90*	90



----- MEN -----

----- WOMEN -----

Water-soluble vitamins

Nutrient	DRI (RDA/AI*)	SONA	DRI (RDA/AI*)	SONA
Vitamin C (mg/day)	90	200-800	75	200-1000
Vitamin B ₁₂ (mcg/day)	2.4	2-3	2.4	2-3
Folate (B ₉) (mcg/day)	400	1000-2000	400	1000-2000
Niacin (B ₃) (mg/day)	16	30	14	25
Pyridoxine (B ₆) (mg/day)	1.3	10-25	1.2	10-20
Riboflavin (B ₂) (mg/day)	1.3	2.5	1.1	2.0
Thiamin (B ₁) (mg/day)	1.2	3.5-9.2	1.1	3.1-9.0

Note: Where numbers have a range, the first value is for adults aged 19-50. The second value is for adults over the age of 51.

- DRI – Daily Recommended Intake. (2010) USDA: Listed as either **RDA in bold** or AI in ordinary type followed by an *
- SONA - Suggested Optimum Daily Allowances

Table 2

The Dietary Reference Intakes (DRI) and Suggested Optimal Daily Nutritional Allowances (SONA)

----- MEN -----

----- WOMEN -----

Minerals

Nutrient	DRI (RDA/AI*)	SONA	DRI (RDA/AI*)	SONA
Boron	N/A	2.5	N/A	2.5-3.0
Calcium (mg/day)	1000-1200*	1000-1200	1000-1200*	1200
Chromium (mcg/day)	35-30*	300	25-20*	200-300
Copper (mg/day)	0.9	1.5-4.0	0.9	1.5-4.0
Iodine (mcg/day)	150	150	150	150
Iron (mg/day)	8.0	20	18.0-8.0	22-20
Magnesium (mg/day)	400-420	500-600	310-320	450-550

Suggested Optimum Nutrient Allowances

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Manganese (mg/day)	2.3*	5-10	2.3*	5-10
Phosphorous (mg/day)	700	800	700	800
Potassium (mg/day)	4700*	2000	4700*	3000
Selenium (mcg/day)	55	200-250	55	200
Sodium (mg/day)	1500-1300*	400	1500-1300*	400
Zinc (mg/day)	11	20	11	17

Note: Where numbers have a range, the first value is for adults aged 19-50. The second value is for adults over the age of 51.

- DRI – Daily Recommended Intake. (2010) USDA: Listed as either **RDA in bold** or AI in ordinary type followed by an *
- SONA - Suggested Optimum Daily Allowances

Sources:

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