

VITAMIN AND MINERAL SUPPLEMENT USE IN AN AUSTRALIAN ADULT GROUP

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Two hundred and one sets of adult twins drawn from the Sydney-Newcastle region were asked to keep a 4-day weighed food record which included details of the type of supplements taken, their strength and frequency of use. One hundred and ninety seven sets (122 Men and 272 Women) kept useable records and of these, 64 (16%) consumed one or more supplement over this period and 55 (86%) were women. The most often used supplements were multivitamin preparations (45% of users) taken on their own or in combination with other supplements, followed by vitamin C (38%), calcium (19%), tocopherol (17%) and B-complex (14%) Just over half (35) of the supplement users consumed one preparation only, whereas the remaining 45% took 2 or more supplements.

Calculation of the mean daily intake for women of these nutrients coming from supplements alone indicates the RDI is exceeded by 2-fold for retinol and niacin, 6-fold for B₁₂, 10-fold for ascorbate and riboflavin and 25-30 fold for B₆, thiamin and tocopherol (Table). The mean intakes for the men are based on too small a sample size for meaningful interpretation but show similar trends to the females in exceeding the RDI for the same group of nutrients.

Table. Mean daily intake from supplements for females

Vitamins	no	daily intake	range	RDI
Retinol	21	1803 µg	310-3600	750
Vitamin D	22	8.3µg	2- 20	-
Tocopherol	29	212 mg	1-3350	7.5
niacin	30	34.2mg	5- 111	12-14
riboflavin	26	16 mg	1- 110	1.2
thiamin	32	29.9mg	2- 400	0.8
folic acid	12	169 µg	25- 400	200
B ₆	37	27.3mg	1- 125	0.9-1.4
B ₁₂	29	12.2µg	1- 75	2
ascorbate	38	319 mg	8-2000	30
Minerals				
Ca	36	163.1mg	6-2180	800
Fe	27	17.6mg	1- 110	12-16
Cu	17	0.9mg	0.3- 3	-
Zn	24	14.8mg	0.4- 112	12-16

Analysis of the diets of the users indicated that 26/64 were not in need of any supplement. Of the remaining 38, in whom intake of at least one micronutrient was \leq minimum daily requirement, the supplement used was inappropriate for 17, appropriate for 11 and alleviated only some deficiencies in 10. Overall, only 17% of supplement users were taking the appropriate supplement.

Clearly, there are a number of people who consider food to be an inadequate source of micronutrients and feel the need to consume excessive quantities of these in supplement form. Equally, those who may be in need of supplementation require more knowledge. Better nutritional education is called for to combat this wasteful exercise.

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