# Who Uses Dietary Supplements? Most People Do.

Dietary supplements are used by the majority of adults in the United States. Usage is higher in women than in men and increases with age and education. Supplement users tend to adopt other healthy habits such as engaging in physical exercise, trying to eat a healthy diet, seeing a physician regularly—suggesting that supplement use is an integral part of an overall interest in wellness.

In some nutrition surveys, users of dietary supplements have been shown to also have somewhat higher nutrient intakes from food, indicating that they pay more attention to their diets. However, the magnitude of the difference in dietary nutrient intake is small, and the intakes of many users as well as nonusers of dietary supplements fall short of recommended levels for a number of vitamins and minerals. (Murphy, White, et al., 2007; Sebastian, Cleveland, et al., 2007)

In a study of a multi-ethnic cohort of more than 100,000 healthy people, 56 percent of the men and 72 percent of the women said they used a supplement at least once a week. The most commonly used supplement was a multivitamin, followed by vitamin C and vitamin E. Among women, calcium was also commonly used. In general, usage increased with age, education, and physical activity. The authors note that higher use among those with more education "may imply a greater awareness of the role of nutrition in good health." (Foote, Murphy, et al., 2003)

In the 2003-2006 National Health and Nutrition Examination Survey (NHANES), involving more than 20,000 respondents, 54 percent of the adults surveyed said they had used a dietary supplement within the past month. (Bailey, Gahche, et al., 2011)

The majority of people reported using only one dietary supplement, generally on a daily basis. The most frequently reported dietary supplement was a multivitamin-multimineral, used by 33 percent of adults. Botanical supplement use was reported by about 20 percent of adults. Dietary supplement usage was higher among women than men, and in adults the prevalence of usage increased with age, reaching 66 percent in men over 70 and 75 percent in women over 70. Among adults, usage was highest in those with more than a high school education (61 percent) and lowest in those with less than a high school education (37 percent).

## PREVALENCE OF DIETARY SUPPLEMENT USE DURING THE PAST MONTH IN NHANES 2003-2006

Adult Populations	Any supplement	Multivitamin/ mineral	Botanical
19-30	39%	27%	13%
31-50	49%	35%	18%
51-70	65%	44%	20%
Over 70	71%	46%	17%

In the 1999-2000 NHANES, a national survey of almost 5,000 adults, 52 percent of the subjects said they had used a dietary supplement in the past month. (Radimer, Bindewald, et al., 2004) The prevalence of use was over 60 percent in adults who were age 50 or greater and in people with more than a high school education. Almost half of supplement users took only one product, 23 percent took two, 13 percent took three, and 17 percent took four or more. The most commonly used supplement was the multivitamin (used by 35 percent of the population), followed by vitamin E at 13 percent and vitamin C at 12 percent.



Supplement use is positively related to several healthrelated characteristics. (Radimer, Bindewald, et al., 2004) This suggests that many people use supplements as one component of a larger effort to adopt a healthy lifestyle. People with a low Body Mass Index (BMI) are more likely to use supplements than people who are obese, and people who engage in moderate or vigorous physical activity are more likely to be supplement users than people who avoid physical activity. Supplement use is more common among people who say their health is excellent than among people who say their health is poor. Nonsmokers and former smokers are more likely to be supplement users than are current smokers. In other words, people do not become supplement users in a vacuum; they adopt supplement use in an effort to improve their health, and they are also likely to adopt other healthy habits.

An annual survey of consumer use of dietary supplements is conducted by the Council for Responsible Nutrition (CRN), a trade association of the dietary supplement industry. Each survey includes a national sample of about 2,000 adults. The 2011 CRN Consumer Survey on Dietary Supplements found that 69 percent of those surveyed identified themselves as supplement users. (CRN, 2011) This figure has remained fairly constant for several years. The percentage who described themselves as supplement users was 66 percent in 2010, 65 percent in 2009, 64 percent in 2008, 68 percent in 2007, and 66 percent in 2006. (CRN, 2009, 2010)

The prevalence of dietary supplement use has increased over time. For example, five national surveys conducted between 1972 and 2006 found that usage among older adults (over age 50) more than doubled during that period from 27 percent to 67 percent. Usage among younger adults (under age 50) was lower than for older adults, but approximately doubled over time, increasing from 22 percent to 45 percent in the five surveys. (Bailey, Gahche, et al., 2011; Block, Cox, et al., 1988; Koplan, Annest, et al., 1986; NCHS, 1999; Radimer, Bindewald, et al., 2004) The following table illustrates this trend. Figures are approximate, since age groupings vary in the five reports.

#### APPROXIMATE PERCENTAGE OF ADULTS UNDER AND OVER AGE 50 USING DIETARY SUPPLEMENTS, NHANES SURVEYS, 1972 TO 2006

NHANES SURVEY	% ADULTS <u>&lt;</u> 50	% ADULTS >50
NHANES I, 1971-74 (Block, et al.)	22%	27%
NHANES II, 1976-80 (Koplan, et al.)	33%	39%
NHANES III, 1988-94 (NCHS)	40%	46%
NHANES 1999-2000 (Radimer, et al.)	45%	60%
NHANES 2003-06 (Bailey, et al.)	45%	67%

A survey of supplement use among more than 18,000 women in Iowa found that usage increased from 66 percent in 1986 (when the women were in their 50s and 60s) to 85 percent in 2004 (when the women were in their 70s and 80s). At the latter date, 27 percent of the women said they used four or more products. Over 60 percent of them used a multivitamin, and about the same number used a calcium supplement. A little over 30 percent said they used vitamin E, and almost 30 percent said they used vitamin C. The authors "suggest that the use of dietary supplements by older individuals could be beneficial in countering

age-related declines in food and nutrient intakes and in maintaining adequate nutriture for nutrients for which absorption declines with age." (Park, Harnack, et al., 2009)

### HEALTH PROFESSIONALS USE DIETARY SUPPLEMENTS

Health professionals are as likely as the general population to use dietary supplements. A survey of women physicians found that 64 percent used vitamin or mineral supplements at least occasionally, and 47 percent used the supplements at least five days a week. (Frank, Bendich, et al., 2000) Two surveys of health professionals enrolled in an online course on dietary supplements reported high levels of supplement use (over 80 percent), perhaps reflecting the interest that led them to enroll in the course. (Gardiner, Woods, et al., 2006; Kemper, Gardiner, et al., 2007)

A survey of 900 physicians and almost 300 nurses found that 51 percent of the physicians and 59 percent of the nurses were regular users of dietary supplements.

(Dickinson, Boyon, et al., 2009) Similarly, a survey of 900 physician specialists found that 37 percent of cardiologists, 50 percent of orthopedists, and 59 percent of dermatologists were regular supplement users. (Dickinson, Shao, et al., 2010; Dickinson, Shao, et al., 2011) When occasional and seasonal use were included, the usage figures were naturally even higher. At least occasional dietary supplement use was reported by 72 percent of physicians and 89 percent of nurses in the earlier study and by 56 percent of cardiologists, 73 percent of orthopedists, and 75 percent of dermatologists in the later study. A third survey of registered dietitians, nurse practitioners, and pharmacists had similar results. (Dickinson, Bonci, et al., 2012) All three surveys were sponsored by the Council for Responsible Nutrition as part of the "Life...supplemented" consumer wellness initiative. The following table shows the percentage of health professionals surveyed who reported that they personally use dietary supplements.

### PERCENTAGE OF HEALTH PROFESSIONALS WHO REPORT PERSONAL USE OF DIETARY SUPPLEMENTS

Profession	Regular User	Occasional	Seasonal	Former	Never Used
Physicians n=900 (family care, ob/gyn, other specialties)	51%	19%	2%	14%	14%
Orthopedists n=300	50%	19%	4%	11%	16%
Cardiologists n=300	37%	17%	3%	18%	25%
Dermatologists n=300	59%	13%	3%	8%	17%
Nurses n=277	59%	27%	3%	8%	3%
Nurse practitioners n=300	71%	21%	3%	4%	1%
Pharmacists n=300	62%	22%	2%	8%	6%
Dietitians n=300	74%	20%	2%	3%	1%

Eighty-one percent of the dietitians surveyed said most people have gaps in their diets that can be filled with vitamins and other dietary supplements, and nine out of ten of them said they take supplements themselves and recommend them to their clients. (Dickinson, Bonci, et al., 2012) The most commonly used supplement reported by dietitians was a multivitamin, but many dietitians also reported using omega-3 fish oils, herbal or botanical supplements, or fiber. The main reasons they gave for using dietary supplements were for bone health (58 percent), for overall health/wellness (53 percent), and to fill nutrition gaps (42 percent).

### **Bottom Line**

The majority of adults in the United States use dietary supplements as part of a healthy lifestyle, and health professionals are just as likely as members of the general public to use them. Dietary supplement use is generally not undertaken in a vacuum, but is one of many actions people take in an effort to improve overall wellness.

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