National Health and Nutrition Examination Survey



Use of Dietary Supplements

Introduction

Use of dietary supplements in the United States appears to be growing, including the use of herbal medicines. Some of the reasons people give for taking supplements include: to improve nutrition, to make up for nutrients missing in the food supply, to decrease susceptibility to or severity of disease, or to increase energy or improve performance. Another factor that may contribute to the increased interest in using dietary supplements is scientific evidence linking diets high in certain nutrients with a reduced risk of certain diseases. Herbs and botanical supplements may be taken as alternatives to conventional medical therapies.

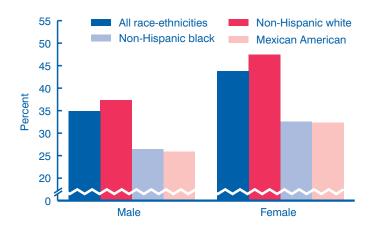
The supplement questions

Survey participants in the Third National Health and Nutrition Examination Survey (NHANES III), conducted between 1988 and 1994, were asked about their use of vitamin and mineral supplements. Participants were not asked specifically about their use of "other dietary supplements," however, many of them voluntarily reported taking these types of supplements. "Other dietary supplements" include products such as herbs and botanical supplements, sports drinks, amino acids, fish oils, metabolites, and biologic extracts.

Use of dietary supplements

 Approximately 40 percent of the population 2 months of age and older were taking a vitamin, mineral, or other type of dietary supplement during the month prior to being interviewed in the NHANES III survey (data not shown). Females were more likely to take supplements than males (44 percent of females versus 35 percent of males) (figure 1).

Figure 1. Prevalence of supplement use by sex and race-ethnicity, NHANES III, 1988–94



- In general, non-Hispanic white persons were more likely to take supplements than non-Hispanic black and Mexican American persons (figure 1). Among men, 37 percent of non-Hispanic whites took supplements compared with 26 percent for both non-Hispanic blacks and Mexican Americans. Among women, 48 percent of non-Hispanic whites took supplements versus 33 percent of non-Hispanic blacks and 32 percent of Mexican Americans.
- Supplement users were more likely to be young children between 1 and 5 years of age, or middle-aged and older adults (figures 2 and 3). Between 42 and 51 percent of toddler and preschool-aged boys and girls were taking supplements. Supplement use declined among gradeschool-aged boys and girls and adolescents, but increased when people reached their 20s and continued to increase throughout adulthood. Supplement use ranged from 30 percent for males in their 20s to 42 percent for males 80 years of age and older, and ranged from 42 percent for females in their 20s to 55 percent for females 80 years of age and older.

Figure 2. Prevalence of supplement use among males, NHANES III, 1988–94

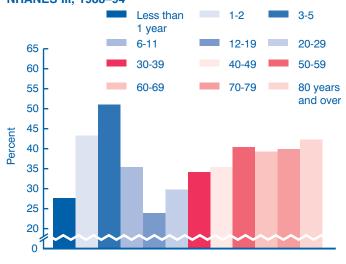
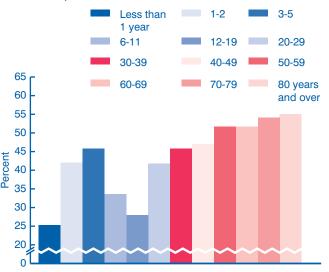


Figure 3. Prevalence of supplement use among females, NHANES III, 1988–94



Number and types of dietary supplements used

- For people who reported taking supplements, most took only one supplement a day. However, the number taking two or more supplements per day increased across the age groups shown. A little less than 10 percent of children were taking two or more supplements, but 33 percent of young adults and 44 percent of middle-aged and elderly adults took two or more supplements per day (figure 4).
- Among supplement users, the most common types of supplements that children took were multiple vitamins or a combination multiple vitamin and mineral. In addition to these supplements, single nutrient vitamins were popular among adolescents and all adults, and single nutrient minerals were also popular among middle-aged and elderly adults (figure 5). The most frequently used single nutrient vitamins were vitamins C and E, and the most frequently used single nutrient minerals were calcium and iron.

Figure 4. Number of supplements taken by supplement users by age group, NHANES III, 1988–94

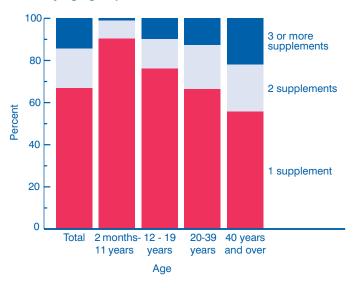
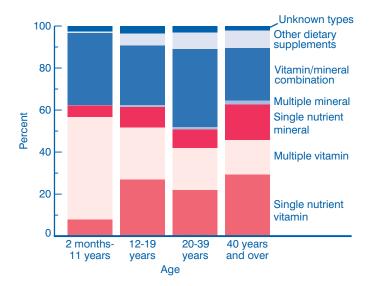


Figure 5. Types of supplements taken by supplement users by age group, NHANES III, 1988–94



Some survey participants also reported their use of "other dietary supplements." Although people were not asked about these types of supplements, the NHANES data do provide an indication of the types of herbal and other alternative supplements that people used. The type of supplements reported covered the whole spectrum of "other dietary supplements" including such things as herbal and botanical supplements like echinacea, garlic, ginseng, gingko biloba, and St. John's Wort; fish oils; amino acids; and energy-enhancing and body-building supplements.

For further information, visit our Web site at: http://www.cdc.gov/nchs/nhanes.htm