

**DIETARY SUPPLEMENTS IN THE U.S. MARKET –
MAJOR CONTRIBUTORS TO NUTRIENT INTAKE**

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ABSTRACT

Nutrient intakes come from three main sources: (1) the natural composition of foods, (2) fortified foods, and (3) dietary supplements. The increasing evidence that higher than usual intake of certain nutrients reduces the risk for some chronic diseases suggests that diets composed of only foods with the natural levels of nutrients cannot--or are not likely to--generate nutrient intakes high enough to produce the observed benefits. The only ways of reaching those higher intakes are fortified foods or dietary supplements. Fortification of specific foods, usually staples, with specific nutrients has the advantage that no effort or decision is required by the consumer, but the disadvantage is that fortification levels high enough to generate desirable intakes in some population subgroups may generate excessive intakes in others. Dietary supplements provide a unique advantage in permitting increased intakes only in those who chose to take them. Survey data indicate that intakes of calcium, chromium folic acid, vitamin E, vitamin C, and several other nutrients are commonly lower than the levels associated with decreased disease risk. Quite high levels of vitamin C intake can be achieved by careful selection of unfortified foods. National policy is changing to increase folic acid intake from fortified foods, in attempt to reduce the risk of certain birth defects. The higher levels of vitamin E shown to reduce heart disease risk cannot be achieved without use of dietary supplements, unless foods were highly fortified.

U.S. GOVERNMENT EFFORTS TO COLLECT DIETARY SUPPLEMENT INTAKE DATA

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ABSTRACT

There is widespread interest in quantifying dietary supplement intake by the U.S. population to determine contribution to total nutrient intakes and for other research purposes. However, because the nature of dietary supplements is complex and many different formulations are available in the U.S., data on supplement intake are difficult to obtain. U.S. Government efforts to obtain such data have included a special survey conducted by the Food and Drug Administration in the late 1970s; the addition of a dietary supplement section to the National Health Interview Survey in the mid 1980s; general supplement intake questions in the recent USDA Continuing Surveys of Food Intakes by Individuals; and more extensive data collection as part of the Third National Health and Nutrition Examination Survey (NHANES III), conducted between 1988 and 1994. NHANES III was designed to look at nutrient intakes both from foods and from dietary supplements. Dietary supplement intake data from ! NHANES III will be used to determine the prevalence of dietary supplement use and to assess the contribution of dietary supplements to total nutrient intake and nutritional status. This panel presentation and discussion will review the challenges presented in collecting dietary supplement intake data and the types of dietary supplement data available from U.S. Government sources.

DIETARY SUPPLEMENT INTAKE DATA FROM THE GERMAN NVS STUDY

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ABSTRACT

Nutrient intake from food supplements generally is not considered in assessment of the nutrition status of US populations, as data on intake of food supplements have been difficult to obtain. However, food supplement intake data were successfully collected in the German Nationale Verzehrsstudie (NVS), allowing assessment of the nutritional impact of supplements. The NVS was conducted in the former Federal Republic of Germany from October 1985 to January 1989. The NVS sample included over 24,000 individuals who completed 7-day weighed food records and 7-day activity diaries. NVS respondents recorded intakes of dietary supplements (e.g. multivitamins, garlic capsules, yeast tablets) in food records. All supplements were assigned food codes, and supplement intake data were integrated with food intake data. Intake of traditional vitamin and/or mineral supplements, identified by brand name, was reported by 361 NVS respondents. Although the percentage of individuals reporting supplement use was small, the average daily nutrient intake from supplements represented a substantial proportion of intake of specific vitamins and/or minerals for many of these individuals. These results indicate that US nutrition status assessments may be significantly enhanced by collection of supplement intake data in US food consumption surveys.