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Special recognition and appreciation are given to the FDA Osteoporosis Working Team, assembled by the FDA Advisory Group on Women's Health Issues, which conceptualized, planned, and administered the conference. The members of the FDA Working Team were: Suzanne C. Fitzpatrick, PhD (Co-Chair), Center for Veterinary Medicine; Patricia M. Kuntze (Co-Chair), Office of Consumer Affairs; Gloria Troendle, MD, and Dennis Myers, Center for Drug Evaluation and Review; Charles Showalter and Don Hamilton, Center for Devices and Radiological Health; and John Vanderveen, PhD, Center for Food Safety and Applied Nutrition (CFSAN). The following consultants to the Working Team supplied their particular expertise: Robert V. Veiga, MD, Office of Health Affairs, FDA; Frederick H. Degnan and Jill Warner, Office of the General Counsel, Department of Health and Human Services; Angela D. Mickalide, PhD, Office of Disease Prevention and Health Promotion, PHS; and Stephen Gordon, PhD, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health (NIH).

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January 1990

## FOREWORD

It was not too long ago that osteoporosis was a little known, and even less understood, disease condition. The all-too-familiar image of an older woman, stooped over with a cane, had become entrenched as a popular health stereotype, promoting misinformation and misconceptions about aging, osteoporosis, and disease prevention. This stereotype perpetuated a myth: osteoporosis—a serious, debilitating condition affecting approximately 20 million Americans and costing an estimated \$7-\$10 billion annually in health care costs and lost productivity—was portrayed as an unavoidable, inevitable part of growing old.

Scientific and medical research in the diagnosis, prevention, and treatment of osteoporosis has tremendously advanced our ability to better understand this condition, to identify who is at risk, and to actively intervene to reduce the debilitating impact of this serious disease condition. Both public and private sector events, such as the FDA Special Topic Conference on Osteoporosis, the 1984 NIH Consensus Development Conference on Osteoporosis, and National Osteoporosis Prevention Week (sponsored annually by the National Osteoporosis Foundation), continue to erode the stereotypes surrounding this condition and to focus national and international attention on specific prevention-intervention.

How to prevent osteoporosis becomes a particularly important question—worthy of consistent emphasis and continued research—as we realize that osteoporosis causes 1.3 million fractures, including 247,000 hip fractures, every year. Not only do hip fractures increase the older woman's chances of being institutionalized, but there is also a high mortality rate associated with these fractures. Of the patients who experience hip fractures, according to Dr. Stephen Cummings, 20 percent die within the first year, 20 percent become All of these experts estimated that the need for calcium far exceeded the amount of calcium women in every age group actually consumed (table 6). Especially noteworthy was their opinion that the average amount an elderly person receives is only 500 mg per day.

Consuming food products with a high calcium content is another way that patients can increase their calcium intake. Physicians have also emphasized the eating of green, leafy vegetables, but recent research suggests that the bioavailability of calcium in green, leafy vegetables is no greater than in some of the tablets that do not dissolve.

In summary, I believe that we can do some simple things to improve the situation. We can advocate

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increased calcium intake and exercise. We can educate women of all ages and take some leadership in the discussion of estrogen therapy, and we should try to keep our messages simple to facilitate public understanding.

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