and treatment, with a particular focus on the practical information needs and concerns of health care providers and public health educators. The conference program vividly demonstrates the high caliber, and outstanding credentials, of the many expert speakers who will be discussing the topics on the agenda.

Finally, a successful conference is based on an audience that is actively involved in advancing our knowledge and ability to prevent and treat osteoporosis. That we have succeeded in this regard

is both obvious and undeniable. Among you are represented the many professions and organizations that will be key to our struggle to deal with the public health problem of osteoporosis. Medical and research organizations, academic and medical institutions, consumer and voluntary health organizations, industries, and all levels of government are represented at this conference. In addition, we welcome attendees from other countries, and we recognize the interest in countries such as Israel, England, and France, who could not be represented.

Opening Session:

Osteoporosis: a priority women's health concern

RUTH L. KIRSCHSTEIN, MD

Dr. Kirschstein is Director, National Institute of General Medical Sciences, National Institutes of Health, Bethesda, MD, and Chair of the Public Health Service Coordinating Committee on Women's Health Issues. These remarks are based on her presentation at the FDA Special Topic Conference on Osteoporosis, held at Bethesda, MD, October 30, 1987.

I WOULD LIKE to join in congratulating the members of the Food and Drug Administration (FDA) Advisory Group on Women's Health Issues, and its Osteoporosis Working Group, for planning such an important event to bring us practical messages and guidance for preventing osteoporosis. The research community has made notable strides in advancing our understanding of this condition: it is particularly essential for us as educators and consumers to draw the key prevention messages from this ever-expanding knowledge base.

It is fitting that the FDA Special Topic Conference on Osteoporosis is visibly recognized as a part of the Federal Government's major initiative to improve women's health in the United States. In 1983, the then Assistant Secretary for Health, Dr. Edward N. Brandt, asked me to lead a nationwide task force to study the status of women's health within the context of the many dynamic changes that have occurred in our society over the past 30 years. Following an indepth review of the primary factors and conditions impacting on women's health, and discussions with women across the country about their priority health

concerns, the Public Health Service (PHS) Task Force on Women's Health Issues developed a comprehensive report on the health of American women. This report recommended specific measures that should be undertaken by both the public and private sectors to improve women's health.

These recommendations are the course of action for directing our collaborative efforts to meet the public health challenges confronting women in today's society. The Task Force recommendations recognize that one of our national health goals is to continue to fortify the essential foundation of knowledge that will enable women to take charge of their health more fully and, more importantly, for women to participate more fully in the preventive services and educational activities within our health care system.

All of us recognize that osteoporosis is a serious public health problem, afflicting approximately 24 million Americans, and costing the nation an estimated \$7 billion in health care and lost productivity. Through the Task Force study, we are also very much aware that this condition is a critical health issue for older women, and presents particular implications for them, especially the following:

- Because women have less bone mass than men, they are at greater risk for osteoporosis.
- The accelerated bone loss that some women experience after menopause is related to a decrease in estrogen levels.
- Osteoporosis increases an older woman's chances of debilitating injury, particularly hip fractures.
- 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.

As a public health community, we clearly recognize that the status of our health in the later years is,

to a large degree, dependent on the health promotion and disease prevention measures we practice in our youth. In seeking to improve the quality of health for women at risk for osteoporosis, our strategy should include instilling healthful and preventive behaviors in the younger woman. Fortunately, the messages about osteoporosis prevention are becoming more defined for the younger woman in terms of the relationship of calcium and exercise to peak bone mass. We should not lose sight of the special health needs of older and very old women, who may be at risk for fractures associated with this condition.

I would like to recognize the leadership of the FDA

in responding to the Task Force recommendations through this conference, and the 1986 National Conference on Women's Health, which was cosponsored by the agency and the PHS Coordinating Committee on Women's Health Issues. Through the FDA Action Plan, Dr. Frank E. Young, Commissioner of Food and Drugs, has formally established a priority standing for women's health, and a public health agenda to guide the FDA Women's Health Initiative. With this as a foundation, we are prepared to go forward to meet the problems posed by osteoporosis.

Opening Session:

Science and Education as the Essential Equation for Successful Prevention

ROBERT E. WINDOM, MD

Dr. Windom was Assistant Secretary for Health of the Department of Health and Human Services, Washington, DC. These remarks are based on his presentation at the FDA Special Topic Conference on Osteoporosis, held at Bethesda, MD, October 30, 1987.

AM DELIGHTED to address public health professionals who have devoted their talents and careers to improving the quality of life and health for those at risk for osteoporosis.

Through your committed efforts, our knowledge about osteoporosis has advanced significantly. We are able to advise women at various stages of their lives about the specific measures they should take to prevent this condition. We have defined more clearly the roles of nutrition, exercise, estrogens, bone mass, and bone loss measurements in assisting women to avoid the debilitating effects of advanced osteoporosis. We are acutely aware of the importance of patient counseling and consumer education in reinforcing key health messages to women. We recognize, however, that we must continue to increase our understanding of osteoporosis—particularly in such areas as fractures and the prevention and treatment of osteoporosis in the very old.

This conference focuses on the fundamental ques-

tions of health care providers, communicators, and educators:

- "How do I counsel my patients about osteoporosis?"
- "How can I tell who is at risk for this condition?"
- "What are the key preventive measures women should adopt in their younger years? ... at middle age? ... in their later years?" These are practical concerns that will be addressed by recognized experts, to identify the key messages that should be communicated to patients and the public.

Education and prevention must be based upon a sound and substantiated foundation. Too often, there is a "Grand Canyon-sized" gap between science and education. Within this gap, we unfortunately find confusing and conflicting messages, misinformation, health fraud, and unwarranted behavior or lifestyle changes. By basing this conference on a firm scientific foundation, the Food and Drug Administration, and the conference cosponsors, will greatly enhance the ability of health care providers, communicators, and educators to take meaningful and effective measures to assist women in their individual efforts to prevent osteoporosis.

I applaud your individual and collective contributions to improving the status of women's health, particularly those women at high risk for osteoporosis. Your strong dedication, and often unsung achievements, have done much to enable women to more fully take charge of their health. Through our continued collaboration in addressing the serious problem of osteoporosis, I am confident that the public health community will make a valuable and enduring difference.