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104TH CONGRESS
2D SESSION

# H. R. 3331

To amend the Public Health Service Act to expand and intensify programs of the National Institutes of Health with respect to research and related activities concerning osteoporosis and related bone diseases.

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IN THE HOUSE OF REPRESENTATIVES

APRIL 25, 1996

Ms. EDDIE BERNICE JOHNSON of Texas (for herself, Mrs. MORELLA, Mr. HAYES, Mr. GENE GREEN of Texas, Ms. WATERS, Mr. HILLIARD, Mrs. MEEK of Florida, Mr. FROST, Mrs. CLAYTON, Ms. LOFGREN, Ms. NORTON, Mr. FRAZER, Mr. THOMPSON, Mr. TOWNS, Miss COLLINS of Michigan, Mr. EVANS, and Mrs. KENNELLY) introduced the following bill; which was referred to the Committee on Commerce

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# A BILL

To amend the Public Health Service Act to expand and intensify programs of the National Institutes of Health with respect to research and related activities concerning osteoporosis and related bone diseases.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE.**

This Act may be cited as the "Osteoporosis and Related Bone Diseases Research Act of 1996".

**SEC. 2. FINDINGS.**

The Congress finds that—

(1) osteoporosis, or porous bone, is a condition characterized by an excessive loss of bone tissue and an increased susceptibility to fractures of the hip, spine, and wrist;

(2) osteoporosis is a threat to an estimated 25,000,000 Americans, 80 percent of whom are women, many of whose cases go undiagnosed because the condition develops without symptoms until a strain, bump, or fall causes a fracture;

(3) between 3 and 4 million Americans have Paget's disease, osteogenesis imperfecta, hyperparathyroidism, and other related metabolic bone diseases;

(4) osteoporosis is responsible for 1,500,000 bone fractures annually, including more than 250,000 hip fractures, 500,000 vertebral fractures, 200,000 fractures of the wrist, and the remaining fractures at other limb sites;

(5) 1 of every 2 women and 1 of every 8 men over age 50 will develop fractures associated with osteoporosis;

(6) direct medical costs of osteoporosis are estimated to be $10,000,000,000 annually for the Unit-

ed States, not including the costs of family care and lost work for caregivers;

(7) direct medical costs of osteoporosis are expected to increase precipitously because the proportion of the population comprised of older persons is expanding and each generation of older persons tends to have a higher incidence of osteoporosis than preceding generations;

(8) technology now exists, and new technology is developing, that will permit early diagnosis and prevention of osteoporosis as well as management of the condition once it has developed;

(9) funding for research on osteoporosis and related bone diseases is severely constrained at key research institutes, including the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Institute on Aging, the National Institute of Diabetes and Digestive and Kidney Diseases, the National Institute of Dental Research, and the National Institute of Child Health and Human Development;

(10) further research is needed to improve medical knowledge concerning—

(A) cellular mechanisms related to the processes of bone resorption and bone forma-

tion, and the effect of different agents on bone remodeling;

(B) risk factors for osteoporosis, including newly discovered risk factors, risk factors related to groups not ordinarily studied (such as men and minorities), risk factors related to genes that help to control skeletal metabolism, and risk factors relating to the relationship of aging processes to the development of osteoporosis;

(C) bone mass measurement technology, including more widespread and cost-effective techniques for making more precise measurements and for interpreting measurements;

(D) calcium (including bioavailability, intake requirements, and the role of calcium in building heavier and denser skeletons), and vitamin D and its role as an essential vitamin in adults;

(E) prevention and treatment, including the efficacy of current therapies, alternative drug therapies for prevention and treatment, and the role of exercise; and

(F) rehabilitation; and

(11) further educational efforts are needed to increase public and professional knowledge of the causes of, methods for avoiding, and treatment of osteoporosis.

**SEC. 3. OSTEOPOROSIS RESEARCH.**

Subpart 4 of part C of title IV of the Public Health Service Act (42 U.S.C. 285d et seq.) is amended by adding at the end the following new section:

**"SEC. 442A. RESEARCH ON OSTEOPOROSIS AND RELATED DISEASES.**

''(a) EXPANSION OF RESEARCH.—The Director of the Institute, the Director of the National Institute on Aging, the Director of the National Institute of Diabetes and Digestive and Kidney Diseases, the Director of the National Institute of Dental Research, and the Director of the National Institute of Child Health and Human Development shall expand and intensify research on osteoporosis and related bone diseases. The research shall be in addition to research that is authorized under any other provision of law.

''(b) MECHANISMS FOR EXPANSION OF RESEARCH.—Each of the Directors specified in subsection (a) shall, in carrying out such subsection, provide for one or more of the following:

''(1) Investigator-initiated research.

''(2) Funding for investigators beginning their research careers.

''(3) Mentorship research grants.

''(4) Specialized centers.

''(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $30,000,000 for the National Institute of Arthritis and Musculoskeletal and Skin Diseases, $6,500,000 for the National Institute on Aging, $6,500,000 for the National Institute of Diabetes and Digestive and Kidney Diseases, $4,000,000 for the National Institute of Dental Research, and $3,000,000 for the National Institute of Child Health and Human Development for each of the fiscal years 1997 through 1999, and such sums as may be necessary for subsequent fiscal years. These funds are in addition to amounts authorized to be appropriated for biomedical research relating to osteoporosis and related bone diseases under any other provision of law.

''(d) RELATED BONE DISEASES DEFINED.—As used in this section, the term 'related bone diseases' includes—

''(1) Paget's disease, a bone disease characterized by enlargement and loss of density with bowing and deformity of the bones;

''(2) osteogenesis imperfecta, a familial disease marked by extreme brittleness of the long bones;

''(3) hyperparathyroidism, a condition characterized by the presence of excess parathormone in the body resulting in disturbance of calcium metabolism with loss of calcium from bone and renal damage;

''(4) hypoparathyroidism, a condition characterized by the absence of parathormone resulting in disturbances of calcium metabolism;

''(5) renal bone disease, a disease characterized by metabolic disturbances from dialysis, renal transplants, or other renal disturbances;

''(6) primary or postmenopausal osteoporosis and secondary osteoporosis, such as that induced by corticosteroids; and

''(7) other general diseases of bone and mineral metabolism including abnormalities of vitamin D.''.

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