

SOCIOLOGY

Fears of Older Americans

Major problems that confront increasing numbers of older citizens of United States are illness, lack of sufficient money and adequate housing—By Faye Marley

► **FEAR OF ILLNESS** and lack of sufficient money are uppermost in the long list of worries that plague most of the nearly 18 million older Americans.

Almost two million of them are working full time, but large numbers are retired at 65 who want to work and who are healthy enough to carry on jobs.

Other related worries are the need for a suitable place to live and the desire to be useful in the community.

These are some of the problems that face not only the men and women in the United States now over 65, but the 30-year-olds of today who will be among the estimated 32,300,000 older persons of the year 2000.

These are some of the facts in the first annual report of the President's Council on Aging presented to President Kennedy by Secretary Anthony J. Celebrezze of the Department of Health, Education and Welfare. The 73-page booklet, titled "The Older American," presents "a broad picture of aging in America as a means of enlisting the interest and concern of Americans generally."

Here are some of the facts for concern:

For the one in six aged persons hospitalized in a year, the hospital bill, not including the doctor's fee and other expenses,

averages about \$525. Health insurance or personal funds cannot meet a large proportion of these bills.

Of the people 65 or older who head households, about one-third live in dilapidated housing or in dwellings inappropriate for the elderly. Progress is being made, but the actual number of housing units built for the aging is small.

Many of the nursing homes in which some half million older Americans live are unsatisfactory by any modern standard, and a great number are actually unsafe.

Adequate income among the aged is still the exception rather than the rule. Older Americans have gained longer life—10,000 of them are more than 100 years old—but their economic, social and medical problems are largely unsolved.

The President's Council on Aging is made up of the heads of eight agencies engaged in research, services or benefits of one kind or another to older Americans. Besides Secretary Celebrezze, members include the Secretaries of Treasury, Agriculture, Commerce and Labor, and the heads of the Civil Service Commission, Veterans Administration and Housing and Home Finance Agency.

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U.S. Army

SPACE FOOD—Bite-size sandwiches were prepared for Astronaut L. Gordon Cooper's successful 22-orbit flight (May 15-16) by food technologists Louis Jokay and Sp-4 Milford Spooner at the Armed Forces Food and Container Institute, Chicago.

SURGERY

Leg Nerves Transplanted To Restore Hand Function

► **NERVES** from one person's amputated leg are helping to restore function to the hands of two patients whose nerve connections to the hand had been severed in accidents. Previously nerve transplants from one person to another caused an inflammatory reaction aroused by foreign tissues. This reaction caused scar tissue to replace the graft.

Dr. Leonard Marmor, orthopedic surgeon at the University of California, Los Angeles, Medical School, solved this problem by having the graft irradiated soon after its removal from the amputated leg. Irradiation reduced scar tissue formation.

The first patient was an 18-year-old boy who lost five inches of his ulnar nerve as a result of a shotgun blast through the forearm. Dr. Marmor replaced the lost part of the nerve with a piece of nerve taken from the amputated leg. Sensation has returned to the boy's fingers, but he has not yet regained movement.

The second case was a 35-year-old school teacher. She had lost three inches of the median nerve of her arm, together with sensation of a thumb and three fingers. Absence of sensation led to several severe finger burns. She also frequently dropped school papers.

Sensation returned to her fingers and she does not drop things anymore since the lost nerve was replaced with a "spare part." Dr. Marmor anticipates return of movement control in both cases. This usually takes longer than the return of sensation.

The nerve grafts actually provide a natural sheath in which the patient can regrow his own nerve. These results indicate nerve banks are possible. Irradiated nerves could be stored in a refrigerator for six months or longer.

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TECHNOLOGY

Atomic Energy Measures Moisture in Materials

► **ATOMIC ENERGY** is now being used to measure moisture in soils as well as in coal, coke and raw materials for making steel.

The atomic detection method, called nuclear magnetic resonance, is more accurate and uses smaller amounts of material than other tests for moisture.

To measure moisture content, atomic particles are first placed in a magnetic field. There they spin like tops at steady rates of speed. Then the particles in the field are excited by radio waves. The material to be measured absorbs energy from the excited particles. The moisture content of the material can be determined by measuring the amount of energy the material has absorbed.

Scientists reviewed the theory and uses of the atomic detection method at the International Symposium on Humidity and Moisture in Washington, D. C.

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