The original documents are located in Box 2, folder "Aging - General (4)" of the Sarah C. Massengale Files at the Gerald R. Ford Presidential Library.

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October 23, 1975

Dear Ms. White:

Thank you for your letter of September 18 to the President, expressing concern over his remarks in transmitting the Annual Report of the Federal Council on the Aging to the Congress.

Please be assured that the President and this Administration are deeply concerned over the impact of the current economic situation on older Americans. We are aware of the financial difficulties faced by many elderly persons living on fixed incomes.

The President asserted in his response to the Federal Council's report that inflation is one of the "cruelest and most pervasive problems facing older Americans," and that reducing its burden on them demands that overall government spending be limited.

To help ease the burdens of inflation upon the elderly, social security and supplemental security income (SSI) payments were increased in June, with the raise reflected in the July checks. Under the law, these payments will now increase automatically whenever the Consumer Price Index rises more than three percent a year (measured from the first quarter of the year to the first quarter of the following year).

Last spring, the President signed a \$22.8 billion antirecession taxcut bill that carried a number of provisions favorable to the elderly, including payment of \$50 each to some 34 million individuals receiving social security, railroad retirement, and SSI benefits. Extension of unemployment compensation payments, tax rebates for 1974, and tax reductions for 1975 are features of the bill that benefit many older Aersons. Also, rules concerning tax deductions for expenses of caring for an elderly relative were liveralized.



The President feels that high standards of safety and care in nursing homes must be maintained. Enforcement by the Department of Health, Education, and Welfare of such standards in nursing homes participating in the Medicare and Medicaid programs is a matter of highest priority.

In responding to the Council's report, the President noted that he is looking forward to receiving from the Council two other Congressionally mandated studies, one on the interrelationships of benefit programs for the elderly and the other dealing with the combined impact of all taxes on the elderly. The results of these studies will be utilized by the Administration and the Congress in evaluating existing programs and services, proposing necessary reforms, and utilizing resources more effectively to benefit older Americans.

I appreciate your taking the time to share your views on this important matter.

Sincerely,

Sarah C. Massengale Assistant Director Domestic Council

Ms. Jeanette White Council on Aging for Southeastern Vermont 139 Main Street Brattleboro, Vermont 05301

THE WHITE HOUSE

WASHINGTON

September 17, 1975

Dear Mr. Applin:

de.

Thank you for your letter to President Ford commenting on the proposed tax cuts for corporations and urging tax relief for the elderly.

As I am sure you realize, the economic well-being of all our citizens, old as well as young, depends on the total output of the economy. If capital available for investment by business becomes scarce or declines, the end result is a smaller level of output available to be consumed. Corporate profits are the main source of business investment, and profits have been declining relative to the rest of the economy for a number of years, so there is good cause for being concerned about the future growth of productive investment. This is why Treasury Secretary Simon proposed the tax reduction on corporate dividends cited in the enclosure to your letter.

Please be assured that concern for capital investment does not indicate a lack of concern for the problems of the elderly and retired. As you probably know, social security payments are automatically adjusted periodically to reflect increases in the cost of living. The enactment of medicare and medicaid also has been an aid to the elderly. As for Federal taxes and the elderly, social security payments are not included in their taxable income, and most older people do not have enough other income to have to pay Federal income tax. Their main tax problem, as you indicated in your letter, appears to be the property tax. Since this tax is a State and local levy, any adjustments to reflect the economic status of the elderly are within the purview of the States and localities. A great many of the States have instituted so-called "circuit-breaker" provisions in recognition of this situation.



The Tax Reduction Act of 1975 (signed on March 29) is helpful to all taxpayers. It provides a rebate on 1974 taxes and a \$50 rebate to all social security recipients, and it increases the low income allowance to \$1,600 for single persons and \$1,900 for married persons filing a joint return. The Act increases the percentage standard deduction to 16 percent with a maximum of \$2,300 for single persons and \$2,600 for married persons filing a joint return. In addition, a personal exemption tax credit of \$30 for each taxpayer or dependent is included in the Act.

Also of assistance to the elderly is the retirement income credit, which is designed to approximate the tax savings from the exclusion of social security or railroad retirement benefits by persons retired under those systems. Under present law, the retirement income credit is 15 percent of the first \$1,524 of retirement income including dividends, interest, rents, pensions, and annuities received by single persons, and 15 percent of \$2,286 for most married couples. The income eligible for the credit, however, must be reduced by income from social security and railroad retirement benefits and other tax-exempt pensions, and for those under the age of 72 by earnings above a specified level.

In its work on tax reform in the last session of the 93rd Congress, the House Committee on Ways and Means tentatively decided to restructure the retirement income credit, including increasing the allowable deduction. The bill was not reported to the House before the Congress adjourned. It is expected that the matter will be given consideration again when the Committee takes up the subject of tax reform later this year.

We appreciate your concern about the tax treatment of the elderly, and we hope these comments are helpful.

Sincerely,

Roland L. Elliott Director of Correspondence

Mr. George B. Applin 362 Atlanta Drive Pittsburgh, Pennsylvania 15228

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FEDERAL COUNCIL ON THE AGING WASHINGTON, D.C. 20201

Cled T.

Re

Sarah Massengale

F. Y. L.

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indomitable and extraordinary individ- Aging, charged with advising and assisting the ual, whose lifetime of achievement stands as a symbol of man's will to be free.

NOTICE OF STAFF PARTICIPATION IN EDUCATIONAL EXCHANGE PRO-GRAM

Mr. HATFIELD. Mr. President, pursuant to the guidelines set forth by the distinguished majority and minority leaders in beir July 10, 1974, Congres-SIONAL RECORD joint statement, I wish to advise that my legal counsel, Mr. Wal-ter H. Evans III, will participate from August/11 to October 13 in the educational exchange program sponsored by the European Community's visitors program. I am advised that this program, sponsored by the European Parliament and Commission of European Communities, closely parallels the leader grant program operated by our Department of State, and meets all criteria established by the July 10 statement. Mr. Evans will be utilizing his regular vacation time during this period.

A QUESTION OF PRIORITIES ON AGING

CHURCH. Mr. President, a few Mr weeks ago President Ford issued a message which tersely rejected major recommendations made to him by the Federal Council on Aging.

As I said in a statement to the Senate on July 28, the President semed to take the attitude that the Council had somehow spoken out of turn by suggesting that there are serious shortcomings in present administration efforts on behalf of older Americans.

Furthermore, it seemed to me that the President was needlessly abrasive in his attitude to the Council, which came into being because of congressional insistence that a high-level unit be established to assist and advise the President on matters related to aging.

Mr. Bernard Nash, executive director of the National Retired Teachers Association-American Association of Retired Persons in a member of that Federal Council, along with 14 other persons with longstanding concern about public issues related to aging.

He has informed me that he deems it unfortunate that the first report of the Council should have been met with so negative a response.

He has also provided an editorial which is appearing in the September AARP News Bulletin. I believe that this emphatic and compelling statement admirably expresses the concern caused by the President's action. I ask unanimous consent to have it printed in the RECORD.

There being no objection, the editorial was ordered to be printed in the RECORD, as follows:

A QUESTION OF PRIORITIES

About 15 months ago, 15 distinguished Americans were sworn in as members of the Congressionally created Federal Council on President and the - Congress in evaluating government policies and programs designed to serve older Americans, recommending needed changes and serving as a spokesman on behalf of older citizens.

. In its first report to the President recently, the Council expressed its view that "the economic plight of the elderly is of crisis pro-portions," requiring special attention by both the executive and legislative branches of government to offset the effects of recession and inflation.

We continue to be distressed," the Council said, "about the apparent lack of con-sideration for the economic plight of the elderly as reflected in the Administration's proposals for the 1976 Fiscal Year budget. Cutbacks in federal monies for social services for the elderly and ceilings on benefit pro-grams financed from social insurance trust funds are particularly burdensome to this age group. Many of their financial assets are tied to fixed sources, while their needs are mobile. We recommend that the President reconsider the serious effects of these fiscal proposals on the elderly of this nation with their urgent humanitarian needs."

To its reasoned and reasonable recommendations, the President responded: "The per-spective and recommendations of this report are limited to a particular area of interest and advocacy. The report does not reflect the Administration's policies, which must reflect a broader range of responsibilities and priorities."

Such harsh language and brusque treatment of a report prepared by a bipartisan council composed of persons highly knowl-edgeable and experienced in the field of aging must be disheartening to the Council, and is surely disappointing to our Associations

The Council is precisely charged with representing a particular area of interest, namely, the needs and concerns of the nation's growing older population. Its very purpose is to help the President and the Congress comprehend the impact of broadly defined priorities on the narrowly defined group of citizens who compose its constituency. For the President to dismiss the recommendations because they do not conform to his policies raises serious questions about his concept of the Council's role and his responsibility. Needed is a spirit of consultation and cooperation, not an attitude of confrontation.

In rejecting the Council's recommendations, the President said he-was sympathetic "to to its concerns, but was determined reduce the burden of inflation on our older citizens, and that effort demands that the government spending be limited. Inflation is one of the cruelest and most pervasive problems facing older Americans, so many of whom lived on fixed incomes. A reduction of inflation, therefore, is in the best interests of all Americans and would be of particular benefit to the aging."

No member of the Council and no older Americans would likely disagree with that statement. The issue is essentially one of priorities. In defining policies and programs to control inflation, the Council is asking the President to be more sensitive to the impact of his decisions on that segment of the population most severely affected.

While all Americans are burdened by rising costs of food, rent, clothing, medical care and transportation, such essentials take a larger proportion of the near-fixed income of the elderly than of the generally higher incomes of younger people in the work force. Rent, for example, takes some 30 percent of the average elderly couple's income com-

pared with 15 percent for younger couple Many elderly who are able to work and woul like to work have been forced out of the labo market completely. Many have ceased eve to look for work and no longer are counted in unemployment statistics. Even those wh can find work are limited in what they ca earn through the "retirement test" of th Social Security system.

When the Council suggested that the Pres ident reassess his priorities in the war o inflation, it surely had in mind his Cor gressionally thwarted attempt to limit in flation-bred Social Security benefit increase to five percent, rather than the 8.7 percer called for through the automatic-escalate provisions of the law. After years of effor by our Association and others, that provisio was enacted to help older citizens cope wit rampant inflation.

And it also had in mind his proposed re ductions in other programs designed to serv the elderly. The President's budget propos for 1976 is actually more than \$42 millic below appropriations for fiscal year 1975.

Congress is now in the process of approv ing the 1975 Amendments to the Older Ame icans Act, with provisions to strengthen preent social services, nutrition, research an training programs. They will place speci emphasis on other services needed to enab older Americans to remain in their ow

homes rather than enter nursing homes. Our Association believes that the change are highly desirable and urgently neede And we trust that the President will giv the measure greater consideration than I did the first report of the Federal Counc on Aging. The measure will demand mon than words of sympathy about the need of older Americans. It will demand an a of approval.

VIRGINIA COUNCIL ON HEALTH AND MEDICAL CARE

Mr. HARRY F. BYRD, JR. Mr. Pres dent, the Senate may soon be calle upon to consider legislation relating the Federal programs of assistance medical students.

One of the most important aspects of the debate on this subject concerns dis tribution of health manpower through out our country. They are, for example some areas where the physician-patier ratio is far below the national averag and below that needed for adequal health care.

The State of Virginia is fortunate i have an ambitious program aimed a solving the problem of maldistribution It is a program administered by the Vin ginia Council on Health and Medic Care, and it has achieved much in re cent years.

Fully 834 physicians have establishe practices in areas of need in the Stat of Virginia. In fact, the Virginia pro gram has been cited by the America Medical Association for outstandin achievement, and recently 17 othe States have contacted the Virginia Cour cil on Health and Medical Cate for mor information on the program.

I am familiar with the council an the great work that they continue to d I know the director of the council, M Edgar J. Fisher, Jr., and I commend th council and Mr. Fisher for his great serv ice to that organization.

Because of the relevance of this Vin

September 10, 197.

Opinion

A Question of Priorities

About 15 months ago, 15 distinguished Americans were sworn in as members of the Congressionally created Federal Council on Aging, charged with advising and assisting the President and the Congress in evaluating government policies and programs designed to serve older Americans, recommending needed changes and serving as a spokesman on behalf of older citizens.

In its first report to the President recently, the Council expressed its view that "the economic plight of the elderly is of crisis proportions," requiring special attention by both the executive and legislative branches of government to offset the effects of recession and inflation.

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Such harsh language and brusque treatment of a report prepared by a bipartisan council composed of persons highly knowledgeable and experienced in the field of aging must be disheartening to the Council, and is surely disappointing to our Associations.

The Council is precisely charged with representing a particular area of interest, namely, the needs and concerns of the nation's growing older population. Its very purpose is to help the President and the Congress comprehend the impact of broadly defined priorities on the narrowly defined group of citizens who compose its constituency. For the President to dismiss the recommendations because they do not conform to his policies raises serious questions about his concept of the Council's role and his responsibility. Needed is a spirit of consultation and cooperation, not an attitude of confrontation.

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Our Association believes that the changes are highly desirable and urgently needed. And we trust that the President will give the measure greater consideration than he did the first report of the Federal Council on Aging. The measure will demand more than words of sympathy about the needs of older Americans. It will demand an act of approval.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE WASHINGTON, D.C. 20201 file

OFFICE OF THE SECRETARY

Office of Human Development Administration on Aging

AUG 1 3 1975

MEMORANDUM FOR THE HONORABLE SARAH MASSENGALE

Attached is the Congressional Research Service document that outlines and describes Federal programs and benefits that assist older persons that we discussed.

I will be sending you shortly a copy of all the Federallevel interagency agreements that Commissioner Flemming has signed.

It was a pleasure to meet you, and I look forward to working with you.

If I can ever be of assistance please don't hesitate to call.

Decker Anstrom Assistant to the Commissioner

Attachment

FEDERAL PROGRAMS AND BENEFITS ASSISTING THE ELDERLY

413



EVELYN TAGER Education and Public Welfare Division

April 18, 1975

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TABLE OF CONTENTS

Introduction	1
Employment and Volunteer Programs. Foster Grandparent Program. Older Americans Community Service Employment Program. National Older Workers Program - (Operation Mainstream). Retired Senior Volunteer Program. Service Corps of Retired Executives. Volunteers in Service to America.	2 2 3 4 5 6 7
Health-Care Facilities and Health-Care Programs. Construction of Health-Care Facilities (Hill-Burton Program). Construction of Nursing Homes and Intermediate-Care Facilities. Grants to States for Medical Assistance Programs (Medicaid). Program of Health Insurance for the Aged and Disabled (Medicare). Veterans Domiciliary Care Facilities and Domiciliary Care Program. Veterans State Nursing-Home Care Facilities and Nursing-Home Care Program.	8 9 10 11 14
Housing Programs. Housing for the Elderly (Section 202). Low and Moderate Income Housing (Section 8). Low Rent Public Housing. Mortgage Insurance on Rental Housing for the Elderly (Section 231) Rental and Cooperative Housing for Lower and Moderate Income Families (Section 236).	16 17 18 19
Income Maintenance Programs. Civil Service Retirement System. Old Age, Survivors Insurance Program (Social Security). Railroad Retirement System. Supplemental Security Income Program for the Aged, Blind and Disabled. Veterans Pension Program.	22 23 24 26

(cont'd)

Page

TABLE OF CONTENTS (cont'd)

• .

. 4

11

·...

(fs

Social Service Programs and Related Programs 2	8
Education Programs for Non-English-Speaking Elderly 2	8
Education Programs to Resolve Problems of the Elderly 2	9
Food Stamp Program	0
Legal Services Corporation	1
Library Materials for the Blind and Physically Disabled	2
Model Projects to Provide for Social Services	13
Multipurpose Senior Citizens 3	14
Nutrition Program for the Elderly 3	5
Older Reader Services	16
Revenue Sharing	
Senior Opportunities and Services	
Social Services for Public Assistance Recipients	
and Low Income Individuals 3	19
State and Community Programs to Provide for Social Services	0
Transportation Assistance	2
	6.0
Training and Research Programs 4	3
Multi-Disciplinary Centers of Gerontology 4	13
Nursing Home Care, Training and Research Programs 4	14
Personnel Training Program in the Field of Aging	15
Research and Demonstration Projects in the Field of Aging 4	16
Research on the Aging Process and Health Problems of the Elderly	17
never on one ngring reveess and nearon revoluis of one Llucity essesses "	5.6

Page

100

100

INTRODUCTION

This report describes Federal programs and benefits either designed solely for the elderly or which assist a significant number of elderly individuals. It covers employment and volunteer programs, health care programs, housing programs, income maintenance programs, nursing home construction and health care programs, social service programs, and training and research programs in the field of aging.

This report does not describe most general purpose programs designed for all age groups even though some of these programs serve elderly individuals. For instance, under income maintenance programs, we have not included the military and foreign service retirement systems which pay benefits to older people but are designed partially to encourage individuals to move out of the military and foreign service in their middle years. In the area of housing, the Department of Agriculture's housing loan programs for the rehabilitation and construction of rural housing are omitted since only an estimated three percent of the loans made available in recent years have gone to elderly individuals. Most manpower and development training programs also are omitted for similar reasons.

This report provides information for each program as follows:

1. Legal authority;

2. Brief description;

Statistical and financial data which represent the latest .
 information available on the program;

4. Administering agency.

EMPLOYMENT AND VOLUNTEER PROGRAMS

FOSTER GRANDPARENT PROGRAM

Authorizing Legislation:

Domestic Volunteer Service Act of 1973 (42 U.S.C. 5022 et seq.) Summary:

The Foster Grandparent Program provides part-time volunteer service opportunties for low-income persons age sixty or over who wish to render supportive service to children receiving care in institutions, hospitals, or in other health, education, welfare and related settings. Volunteers also serve as senior health aides for older persons receiving home-health care and nursing care, and as senior companions to persons with developmental disabilities.

Foster grandparent projects are established on the local level through Federal grants made available to public and nonprofit private agencies or organizations. The Federal share of each local Foster Grandparent Program may be up to 100 percent of the costs of developing and operating the project. Participants work an average of 20 hours per week and receive a stipend equal to at least the Federal minimum wage.

Statistical and Financial Data:

As of January 1975, there were 156 foster grandparent projects and 12,833 individuals serving as volunteers.

The appropriation for fiscal year 1975 was \$30.840 million.

Administering Agency:

ACTION 806 Connecticut Avenue N.W. Washington, D.C. 20520

OLDER AMERICANS COMMUNITY SERVICE EMPLOYMENT PROGRAM

4.5%

Authorizing Legislation:

The Older Americans Community Service Employment Act; (42 U.S.C. 3062 et seq.)

Summary: .

The Older Americans Community Service Employment Program provides part-time work opportunities in community service activities for unemployed low-income persons who are fifty-five years of age or older and who have poor employment prospects.

The Secretary of Labor is authorized to enter into agreements with public on private nonprofit agencies or organizations to pay up to 90 percent of the costs of establishing and operating a project for the employment of older persons. Up to 100 percent of the costs may be paid for a project located in an emergency or disaster area or in an economically depressed area.

Community service activities may include social, health, welfare, educational, library, recreational, and other similar services; conservation, maintenance, or restoration of natural resources; community betterment or beautification; anti-pollution and environmental quality efforts; economic development; and other services which are essential and necessary to the community.

Older persons participating in a community service employment project are to be paid a rate equal to at least the Federal minimum wage.

Statistical and Financial Data:

The appropriation for fiscal year 1975 was \$12 million. There are 3,400 volunteer positions established under this program.

Administering Agency:

Manpower Administration U.S. Department of Labor Washington, D.C. 20201

NATIONAL OLDER WORKERS PROGRAM - (OPERATION MAINSTREAM)

Authorizing Legislation:

Summary:

Under the National Older Workers Program, commonly known as Operation Mainstream, Federal grants are awarded to public and private nonprofit agencies or organizations to pay up to 90 percent of the cost to develop work and training projects, primarily in rural areas, for lowincome unemployed individuals age 55 and over. Jobs may entail planting trees and shrubbery near highways, cleaning lakes, restoring historical sites, and improving public parks and recreation areas. They also may involve social service activities where participants work as aides in libraries, schools, nutrition programs, day care centers and other community service activities.

Statistical and Financial Data:

There are 8,900 volunteers age 55 and over participating in the National Older Workers Program at an annual Federal operating cost of \$11,055,000.

CRS-4

Administering Agency:

Manpower Administration U.S. Department of Labor Washington, D.C. 20210

RETIRED SENIOR VOLUNTEER PROGRAM

400

CRS-5

Authorizing Legislation:

Domestic Volunteer Service Act of 1973 (42 U.S.C. 5022) Summary:

Under the Retired Senior Volunteer Program grants are awarded to private nonprofit organizations or public agencies to pay all or part of the cost of establishing or expanding volunteer service activities for the elderly. Volunteers serve in many capacities such as tutoring children in school settings, assisting day care centers, providing services to disabled persons, counseling juvenile delinquents, and assisting local planning commissions in the resolution of problems concerning the environment. Participants are compensated for out-of-pocket expenses incidental to their volunteer services such as transportation and meals.

Statistical and Financial Data:

As of January 1975, there were 662 grant recipients for retired senior volunteer projects, and 120,319 individuals participating in volunteer service projects.

The fiscal year 1975 appropriation was \$15.980 million.

Administering Agency:

ACTION 806 Connecticut Avenue, N.W. Washington, D.C. 20520

SERVICE CORPS OF RETIRED EXECUTIVES

Authorizing Legislation:

Domestic Volunteer Service Act of 1973 (42 U.S.C. 5033)

Summary:

The Service Corps of Retired Executives (SCORE) is a volunteer program through which retired professionals and business people assist the owners and managers of small businesses with operating, management, and other related problems. Volunteers participating in this program join local SCORE chapters organized through the field offices of the Small Business Administration.

SCORE volunteers provide assistance primarily to retailers and owners of service businesses such as shoe repair shops, dry cleaners, auto body shops, and a wide variety of small manufacturers. They also help retired military personnel and other individuals who request assistance in starting their own business. Volunteers are reimbursed for out-of-pocket expenses.

Statistical and Financial Data:

There are 265 SCORE chapters throughout the country and 5,220 SCORE volunteers. The fiscal year 1975 appropriation was \$400,000.

Administering Agency:

(the

ACTION 806 Connecticut Avenue, N. W. Washington, D.C. 20520

VOLUNTEERS IN SERVICE TO AMERICA

60%

Authorizing Legislation:

Domestic Volunteer Service Act of 1973 (42 U.S.C. 4951 et seq.) Summary:

Through the Volunteers in Service to America Program (VISTA), individuals age 18 and over volunteer to serve in urban and rural poverty areas, on Indian reservations, with migrant families, and in Federally assisted institutions for the mentally ill and retarded to help reduce poverty. Volunteers participate in varied activities including remedial education activities, employment counseling, economic development, housing and community planning, the delivery of health care, and other needed services.

Full time volunteers serve for at least one year and usually live within the community where they serve. Part-time volunteers may commute to their project site. All volunteers receive a monthly living allowance to cover the cost of food, travel and other incidentals. Older workers in the VISTA Program are primarily part-time volunteers.

Statistical and Financial Data:

As of January 1, 1975, there were 467 sponsors of VISTA projects and 4,747 VISTA volunteers ages 18 and over of whom 380 were age 60 and older.

This report does not contain financial data on the VISTA program as most volunteers are not elderly.

Administering Agency:

ACTION 806 Connecticut Avenue, N.W. Washington, D.C. 20520

HEALTH-CARE FACILITIES AND HEALTH-CARE PROGRAMS

CONSTRUCTION OF HEALTH-CARE FACILITIES (HILL-BURTON PROGRAM)

Authorizing Legislation:

Public Health Service Act, as amended, title XVI; (42 U.S.C. 291) Summary:

Title XVI of the Public Health Service Act, commonly referred to as the Hill-Burton Program, authorizes formula grants or loans to private nonprofit organizations, State governments, and other public agencies for the construction, expansion, or modernization of health-care facilities. Facilities funded under this program include long-term care facilities such as nursing homes, chronic disease facilities, and long-term care units in hospitals as well as other health-care facilities provided they meet a community need as determined by the Hill-Burton State agency.

The Federal share of a project varies in each State and is based on a State plan developed by the Hill-Burton State agency. Generally, it ranges from one-third to two-thirds of the total cost of the construction or remodeling. Loans are made available for a maximum of 40 years at low interest rates.

Statistical and Financial Data:

As of February 1975, the Hill-Burton program has provided assistance for 102,300 long-term care beds in nursing homes, chronic disease hospitals and long-term care units of general hospitals.

The Federal share in fiscal year 1975 was \$10 million.

Administering Agency:

Health Services Administration U.S. Department of Health, Education, and Welfare Rockville, Maryland 20852

CONSTRUCTION OF NURSING HOMES AND INTERMEDIATE-CARE FACILITIES

Authorizing Legislation:

The National Housing Act, as amended in 1959, section 232; (12 U.S.C. 1715 z-1)

Summary:

The Section 232 Program authorizes the Federal government to insure lenders against the loss of mortgages acquired by eligible sponsors to finance the construction or rehabilitation and equipment of certified nursing homes or intermediate-care facilities accommodating 20 or more patients. Nursing homes insured under this program must provide skilled nursing-home care and specified related medical services. Intermediate-care facilities must offer continuous but minimum health-care services by licensed or specially trained health care personnel. Nursing home services and intermediate-care services may be combined in the same facility covered by an insured mortgage or may be in separate facilities.

Sponsors, who may be private nonprofit corporations or associations or individuals, are eligible for insured mortgages with terms of up to 40 years. Statistical and Financial Data:

During the past 14 years, the Federal government has insured the mortgages for about 1,000 long-term care facilities consisting of 100,000 beds. The total amount of insurance writted for these projects was approximately \$1 billion.

Administering Agency:

The Section 232 program is administered by the regional offices of the U.S. Department of Housing and Urban Development, and the national office whose address is:

4.050

Federal Housing Administration U.S. Department of Housing and Urban Development Washington, D.C. 20410

GRANTS TO STATES FOR MEDICAL ASSISTANCE PROGRAMS (MEDICAID)

Authorizing Legislation:

Social Security Act, as amended, title XIX; (42 U.S.C. 1396 et seq.) Summary:

The medical assistance program, commonly known as medicaid, provides grants to States to design and administer a State program of medical assistance for certain low-income persons who are aged, blind and disabled, recipients of public assistance programs, and, at the State's option, persons who are medically indigent. Eligibility for medical assistance is related to a number of factors, but particularly to the income and other economic resources of the applicants.

The Federal law provides a comprehensive list of services that States may include as part of their medicaid program. From this list there is a minimum number of services that are required such as inpatient hospital services, outpatient hospital services, laboratory and X-ray services, skilled nursing facility services, and physicians services. Other services on the list include home-health services, private duty nursing services, prescribed drugs, and intermediate-care facility services. The Federal government helps finance a State's medical assistance program by means of variable matching formulas. As a minimum, the Federal government will pay 50 percent of the medical assistance costs incurred by a State in providing health care under a medicaid program. In poor States, the Federal share of medical assistance payments may increase up to 83 percent.

CRS-11

All States but Arizona have medicaid programs.

Statistical and Financial Data:

An estimated 4, 327,000 persons age 65 or over will receive assistance through the medicaid program during fiscal year 1976.

The medicaid program is an "open-end" program. Except for the limitation on payments for the medically needy, there is no limit to the amount of money the Federal government will pay to match the States' contribution.

Administering Agency:

The medicaid program is administered at the State level by a designated State agency. At the national level the program is administered by:

> Social and Rehabilitation Service U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

PROGRAM OF HEALTH INSURANCE FOR THE AGED AND DISABLED (MEDICARE)

Authorizing Legislation:

The Social Security Act, as amended, title XVIII; (42 U.S.C. 1395 et seq.)

Summary:

The health insurance program, commonly known as medicare, provides benefits to most people age 65 and over. Health insurance protection under this program is available to eligible persons without regard to their incomes or assets.

Medicare consists of two parts; the Hospital Insurance program (HI), and the Supplementary Medical Insurance program (SMI). The Hospital Insurance program provides payments on behalf of most persons age 65 or over, and other eligible persons subject to certain deductibles and coinsurance requirements for the costs of specified services. These services include specified hospital services, post-hospital home-health services, and post-hospital extended care services. For the most part, the Hospital Insurance program is financed by means of a special hospital insurance payroll tax levied on employees, their employers, and self-employed individuals covered by the social security program. Costs of providing hospital insurance benefits to eligible individuals not entitled to cash benefits under this program are financed through Federal funds.

The Supplementary Medical Insurance program is a voluntary program in which almost everyone age 65 or over may enroll. Enrollees pay a monthly premium and the aggregate of these premiums is matched by the Federal government through appropriations from general funds. Coverage under this program includes services of medical doctors, osteopaths, chiropractors, 100 days of home-health care in addition to home-health care services provided for in the Hospital Insurance program; certain diagnostic services, x-ray services, and outpatient and laboratory services.

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4.5%

During any calendar year, Supplementary Medical Insurance (with certain exceptions) pays 80, percent of the reasonable charges for all covered services, after the insured pays the first \$60.00 toward the costs of such services.

Statistical and Financial Data:

The estimated number of persons who are to receive assistance through the medicare program during fiscal year 1976 is 18,965,000. Of this number an estimated 5,675,000 are to receive assistance under the Hospital Insurance program and an estimated 13,278,000 are to receive assistance under the Supplementary Medical Insurance program.

Payments to vendors of medical care for fiscal year 1976 are estimated to total \$11,380,000,000 under the Hospital Insurance program and \$4,145,000,000 under the Supplementary Medical Insurance program.

Administering Agency:

Information concerning medicare may be obtained at offices of the Social Security Administration located in numerous cities throughout the country. At the national level, the medicare program is administered by:

> Social Security Administration U.S. Department of Health, Education, and Welfare Baltimore, Maryland 21235

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VETERANS DOMICILIARY CARE FACILITIES AND DOMICILIARY CARE PROGRAM

6.03

Authorizing Legislation:

(38 U.S.C. 5001-5002) (38 U.S.C. 641-643) Summary:

The Veterans Administration is authorized to provide funds for the construction or repair of facilities providing domiciliary care services to veterans. The domiciliary care program provides medical and personal care in a residential-type setting to aged and disabled veterans who do not require hospitalization or skilled nursing home services.

The Veterans Administration also makes payments to State homes providing domiciliary care services to veterans. The per diem rate is \$3.50 for each veteran.

Statistical and Financial Data:

As of January 1975, there were 18 domiciliary facilities. An estimated 9,198 veterans of whom 34 percent were age 65 and older received care daily. 75 percent of the veterans receiving care in State domiciliary homes were age 65 and older.

The estimated Federal fiscal year 1975 expenditures are \$48,904,000 for the construction or remodeling of veteran domiciliary facilities.

Administering Agency:

Extended Care Facilities Veterans Administration Washington, D.C. 20420

VETERANS STATE NURSING-HOME CARE FACILITIES AND NURSING HOME CARE PROGRAM

4.5%

CRS-15

Authorizing Legislation:,

(38 U.S.C. 5031-5037) (38 U.S.C. 641-643)

Summary:

The Veterans Administration is authorized to assist the States in the construction of State homes for veterans where nursing home care is provided. The Federal government may pay up to 50 percent of the cost of each construction project. To receive care in a home constructed through this program, veterans must meet State admission criteria--including residency in the State for a specified period of time. The per diem rate of payment from the Veterans Administration to a State nursing home for each veteran is \$5.00. Statistical and Financial Data:

As of January 1975, there were 31 State nursing home care facilities. An estimated 6,500 veterans of whom 75 percent were age 65 and older received care daily in these facilities.

The estimated fiscal year 1975 expenditures for grants to assist States in constructing State nursing homes are \$11,300,000.

Administering Agency:

Extended Care Facilities Veterans Administration Washington, D.C. 20420

HOUSING PROGRAMS

HOUSING FOR THE ELDERLY (SECTION 202)

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Authorizing Legislation:

The Housing Act of 1959, as amended, section 202; (12 U.S.C. 1715 z-1) Summary:

The Section 202 program is designed to increase the housing supply for low and moderate-income elderly and handicapped individuals with incomes too high to qualify for public housing units but too low to obtain housing on the private market. The program is a direct loan program under which the Federal government makes loans to private nonprofit corporations, public agencies, and limited-profit partners for constructing or rehabilitating multifamily rental housing for elderly and handicapped individuals. Sponsors receiving these loans, which can be up to 100 percent of the mortgage, repay the government over a 50-year period at the market interest rates. Low income tenants do not have to pay more than 25 percent of their net income for rent.

This program was phased out by the Administration in 1969, but reactivated under the Housing and Community Development Act of 1974.

Statistical and Financial Data:

As of January 1975, there were commitments to finance 1,700 Section 202 units at a cost of \$34 million. In fiscal year 1976, there will be commitments for an estimated 8,750 units at a cost of \$175 million.

Administering Agency:

Federal Housing Administration U.S. Department of Housing and Urban Development Washington, D.C. 20410

LOW AND MODERATE INCOME HOUSING (SECTION 8)

Authorizing Legislation:

The Housing Act of 1937, as amended (42 U.S.C. 1437 f)

Summary:

Under this program, developers build and rehabilitate housing after entering into agreements with local housing authorities to lease their units to low and moderate income persons and families. The Federal government may subsidize the rent of low income tenants down to 15-25 percent of the tenant's income.

Preference for funding projects under this program is given to projects with less than 20 percent of the units subsidized. Projects for the elderly may have the same preference with 100 percent of the units subsidized.

The fiscal year 1976 budget states that the Section 8 program will be used as the primary vehicle for providing housing assistance to lower income families in 1975 and 1976.

Statistical and Financial Data:

As of January 1975, there were commitments to finance 200,000 Section 8 units. In fiscal year 1976, there will be commitments for an estimated 400,000 units. Information is unavailable as to the number of units occupied by elderly individuals.

Administering Agency:

Federal Housing Administration U.S. Department of Housing and Urban Development Washington, D.C. 20410

LOW-RENT PUBLIC HOUSING

2010

Authorizing Legislation:

U.S. Housing Act of 1973, as amended; (42 U.S.C. 1401-1435) Summary:

Through the Public Housing program, Federal loans are granted to local housing authorities, which in turn use these loans (along with funds acquired from the sale of bonds and notes) to purchase, rehabilitate, lease, or construct public housing projects. Units within public housing projects are rented to low-income families, elderly individuals age 62 or over, and handicapped individuals, who meet the income limitation and need requirements established locally. The rental charge is determined after taking into account the tenant's ability to pay and the financial solvency of the housing project. By law, rents in these projects may not exceed 25 percent of a family's income.

Public housing projects are designed for all age groups. In addition, the law authorizes loans for projects specifically designed for the elderly. Communal dining rooms and other shared facilities also may be developed in projects where a significant number of elderly people live.

Statistical and Financial Data:

As of January 1975, there were commitments to finance 38,000 units under the low-rent public housing program. In fiscal year 1976, there will be commitments on an estimated 6,000 units. Information is unavailable as to the number of units occupied by elderly individuals.

Administering Agency:

The Low-Rent Public Housing program is administered locally by the designated local housing authority. At the national level it is administered by:

U.S. Department of Housing and Urban Development . Washington, D.C. 20410

MORTGAGE INSURANCE ON RENTAL HOUSING FOR THE ELDERLY (SECTION 231)

Authorizing Legislation:

National Housing Act, as amended in 1959, Section 231; (12 U.S.C. 1715V) Summary:

Section 231 authorizes a mortgage insurance program under which the Federal government insures lenders against the loss of mortgages used to finance the construction or rehabilitation of multifamily, rental housing designed for occupancy by the elderly or handicapped individuals. Tenants living in Section 231 projects generally have a higher income than those individuals residing in Federal housing for moderate-income families.

The Federal Government insures mortgages up to 40 years at market interest rates. Profit-motivated sponsors may obtain mortgage insurance

amounting to 90 percent of the mortgage, while nonprofit sponsors may obtain mortgage insurance amounting to 100 percent of the mortgage. A Section 231 project must contain at least 8 dwelling units.

2.93

Statistical and Financial Data:

This program has not been funded in recent years.

Administering Agency:

Federal Housing Administration U.S. Department of Housing and Urban Development Washington, D.C. 20410

RENTAL AND COOPERATIVE HOUSING FOR LOWER AND MODERATE INCOME FAMILIES (SECTION 236)

Authorizing Legislation:

The Housing and Urban Development Act of 1968, Section 236; (12 U.S.C. 1715z-1)

Summary:

The Section 236 program is an interest subsidy program under which private enterprise develops rental and cooperative housing for lower to moderate income families, handicapped individuals and elderly individuals. Developers of Section 236 projects borrow money from the private money market at going interest rates, and the Federal government then repays the lender of the mortgage down to one percent of the interest on the mortgage. Since sponsors pay reduced interest rates, they are able to reduce the rental charge on subsidized units for eligible tenants.

To qualify for occupancy in a subsidized unit, a tenant must meet the income limitation requirement. These income limits are established locally and on a case-by-case basis. Generally, tenants must have an income which

is 35 percent more than the income limitation requirement set for initial occupancy in public housing in the area. Tenants are required to pay at least 25 percent of their income for rent, but no more than the fair market rent. Families with higher incomes may occupy apartments in a Section 236 project, but may not benefit from the interest subsidy payments.

In addition to Section 236 projects designed for all age groups, the law authorizes interest subsidies for Section 236 projects specifically designed for the elderly. It also authorizes interest subsidies for special facilities such as community kitchens, common dining areas, and other shared facilities in projects designed for the elderly.

Statistical and Financial Data:

Projects under this program will be approved in 1975 and 1976 on a limited basis and only where bona fide commitments cannot be met under the lower income housing assistance program--Section 8.

Administering Agency:

The Section 236 program is administered by regional offices of the U.S. Department of Housing and Urban Development and the national office whose address is:

> Federal Housing Administration U.S. Department of Health, Education and Welfare Washington, D.C. 20410

INCOME MAINTENANCE PROGRAMS

CIVIL SERVICE RETIREMENT SYSTEM

Authorizing Legislation:

The Civil Service Retirement Act, as amended; (5 U.S.C. 8331 et seq.) Summary:

Under the Federal Civil Service Retirement system, the principal retirement system for Federal civilian employees, monthly annuities are paid to eligible retired workers, to the widows and minor children of employees who die, and, in certain circumstances, to other designated survivors of annuitants. An individual's entitlement to benefits and the level of these benefits are based on past earnings and length of service. Generally, the amount of one's annuity is based on the annual salary received during the three consecutive years which afford the highest dollar average.

Individuals are eligible for retirement benefits at age 62 after 5 years of service, at age 60 after 20 years of service, or at age 55 after 30 years of service. Retirement is compulsory at age 70 with 15 years of service. Upon retirement, an employee may accept a reduced annuity in order to provide a survivor's benefit to his spouse upon death.

A widow's benefit is 55 percent of the amount which would have been paid to her deceased husband if alive.

The Civil Service Retirement system is financed primarily through contributions paid by the employee and matched by the employing agency. Employees contribute 7 percent of their basic salary with no ceiling. The Federal government through Congressional appropriation is responsible for the balance of the cost of the program.

453

Statistical and Financial Data:

During fiscal year 1976, there are to be an estimated 1,464,504 civil service annuitants receiving a total of \$8,536,000,000 in benefit payments. Administering Agency:

> U.S. Civil Service Commission Washington, D.C. 20415

OLD-AGE, SURVIVORS INSURANCE PROGRAM (SOCIAL SECURITY)

Authorizing Legislation:

The Social Security Act, as amended, title II; (42 U.S.C. 401 et seq.) Summary:

The Old-Age and Survivors Insurance program, commonly known as social security, provides monthly cash benefit payments to retired workers, their dependents, and to survivors of deceased workers. An individual's entitlement to benefits and the level of these benefits are based on past earnings in employment covered by the program.

Insured persons are eligible for retirement benefits at age 65 and permanently reduced benefits as early as age 62. Widows or widowers of insured workers at age 65 are paid 100 percent of the amount which would have been paid to their deceased spouse if alive; or at age 60 they may elect to receive permanently reduced benefits.

The social security program is financed through a payroll tax paid by employees, their employers and self-employed individuals.

CRS-23

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Statistical and Financial Data:

As of December 1974, there were 20,026,000 social security beneficiaries age 65 and older, of whom 14,331,000 were retired workers, 4,417,000 were survivors and dependents and 278,000 were receiving special age 72 benefits.

The average monthly benefit payment for retired workers for December 1974 was \$188.21, and \$177.29 for aged widows and widowers.

Administering Agency:

Information on the social security program may be obtained from social security offices located in numerous cities throughout the country. At the national level the program is administered by:

Social Security Administration U.S. Department of Health, Education, and Welfare Baltimore, Maryland 21235

RAILROAD RETIREMENT SYSTEM

Authorizing Legislation:

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The Railroad Retirement Act of 1935, as amended; (45 U.S.C. 351-367) Summary:

The Railroad Retirement system provides monthly cash benefit payments to eligible retired and disabled workers, their wives and survivors. To qualify for these benefits, an individual must have worked in covered railroad employment for at least 120 months (10 years) and, in most cases, must have worked for a railroad for at least 12 out of the last 30 months before his retirement or death. A worker is credited with railroad work each month he

does some compensated work for a covered employer. Covered employers include railroads engaged in interstate commerce, the REA Express, railroad associations, and national railway labor organizations.

The amount of the retirement annuity depends on the employee's years of service and average monthly railroad compensation.

Employees are eligible for retirement benefits at age 65 or actuarially reduced benefits as early as age 62. Employees with 30 years of service may receive full benefits as early as age 60. Widows at age 60 are paid the same amount which would have been paid to their deceased spouses, provided a widow has not remarried.

Individuals who work less than 10 years in employment covered by the Railroad Retirement system have their coverage transferred to the social security system.

The Railroad Retirement system is financed primarily through contributions in the form of a payroll tax paid equally by employees and employers. Statistical and Financial Data:

In January 1975, there were 1,134,000 Railroad Retirement annuitants receiving \$250,844,000 in benefit payments.

Administering Agency:

Railroad Retirement Board 844 North Rush Street Chicago, Illinois 60611

SUPPLEMENTAL SECURITY INCOME PROGRAM FOR THE AGED, BLIND AND DISABLED

6.000

Authorizing Legislation:

Social Security Act, as amended; title XVI; (42 U.S.C. 1381 et seq.) Summary:

The Supplemental Security Income program is a Federal cash assistance program through which aged, blind and disabled individuals with no other income are guaranteed a monthly Federal payment of \$146.00 and couples with no other income are guaranteed \$219.00 per month.

In addition, recipients who receive any other income, including social security benefits, will be assured that the first \$20.00 of this income will not cause any reduction in their Supplemental Security Income payment. Also, \$65.00 a month of earned income plus one-half of any remaining earnings will not cause any reduction in monthly payments.

This program also provides that the States may, and in some cases must, supplement Federal payments. The law requires that the State must supplement the Federal payment of people who are beneficiaries under the present Federal-State welfare program in December of 1973. This will assure that these recipients receive the same total monthly payment under the Federal Supplemental Security Income program as they did under the State program. States are not required to supplement Federal payments of 'recipients who become eligible for Supplemental Security Income payments after December 1973.

To qualify for Supplemental Security Income payments, an aged, blind or disabled person must meet certain eligibility requirements as defined in the Federal law. An aged person must be at least 65 years of age with

CRS-26

assets of less than \$1,500. An elderly couple cannot have assets that exceed \$2,250, In determining assets for the purpose of this program, the value of a home, household goods, certain personal effects and property needed for self support, if found to be reasonable, are to be excluded.

4.5%

Statistical and Financial Data:

An estimated 2, 415, 000 aged individuals will be receiving Supplemental Security Income payments in fiscal year 1976.

Administering Agency:

Social Security Administration U.S. Department of Health, Education, and Welfare Baltimore, Maryland 21235

VETERANS PENSION PROGRAM

Authorizing Legislation:

(30 U.S.C. 15 et seq.)

Summary:

Through the Veterans Pension program monthly cash benefits may be paid to persons age 65 or over. Generally, to qualify for these benefits an individual must have had 90 or more days of military service, including at least 1 day of wartime service, and meet specified income limitation requirements. Monthly benefits also are paid to widows of eligible annuitants.

Veterans who served in World War I or after are subject to income limitations for pension eligibility, while veterans who served in the Spanish-American War are paid pensions on the basis of service without regard to need. The amount of pension paid to veterans of World War I and after varies according to the veteran's annual income.

Statistical and Financial Data:

During fiscal year 1976, an estimated 1,563,000 veterans and an estimated 1,155,000 survivors are to receive a pension under this program. The average payment per case is projected at \$1,580 a year for veterans and \$942 for survivors.

Administering Agency:

Veterans Administration Washington, D.C. 20420

SOCIAL SERVICE PROGRAMS AND RELATED PROGRAMS

EDUCATION PROGRAMS FOR NON-ENGLISH-SPEAKING ELDERLY

Authorizing Legislation:

Adult Education Act, as amended in 1973, section 310 (20 U.S.C. 1201 et seq.)

Summary:

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The 1973 Comprehensive Older Americans Services Amendments broadened the Adult Education Act to provide for special education programs. Through this Act, Federal grants can be made to State and local educational agencies or other public or private nonprofit agencies for education programs designed to serve elderly persons whose ability to speak and read the English language is limited and who live in an area with a culture different than their own. Programs must help participants deal with practical problems encountered

4.004

in everyday life, including the making of consumer purchases, meeting their housing and transportation needs, and complying with governmental requirements such as those for obtaining citizenship, public assistance and social security benefits.

Statistical and Financial Data:

The program has never been funded.

Administering Agency:

Office of Education U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

EDUCATION PROGRAMS TO RESOLVE PROBLEMS OF THE ELDERLY

Authorizing Legislation:

The Higher Education Act of 1965, as amended, in 1973; title I;

(20 U.S.C. 1001 et seq.)

Summary:

The Older Americans Comprehensive Services Amendments of 1973 amended the Higher Education Act of 1965 to authorize assistance for the elderly through certain educational institutions. The Federal government is authorized to award grants to institutions of higher education to assist these institutions in planning, developing, and carrying out programs specifically designed to apply the resources of higher education to the problems of the elderly. Special consideration is given to sponsors who develop programs to meet the transportation and housing needs of elderly persons living in rural and isolated areas.

Statistical and Financial Data:

The program has never been funded.

Administering Agency:

Office of Education U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

FOOD STAMP PROGRAM

Authorizing Legislation:

The Food Stamp Act of 1964, as amended; (7 U.S.C. 2016-2025) Summary:

Through the Food Stamp program, the Federal government makes food stamps available to local public welfare or other designated agencies for sale to low-income families. The coupons are then used by the participants for purchasing food in retail stores worth more than the amount paid or the coupons. Persons age 60 or over who are homebound, physically handicapped, or otherwise unable to adequately prepare all their meals are able to exchange food stamps or coupons for meals prepared and served by certain nonprofit sponsors.

To qualify for food stamps, an elderly family must meet the income limitation requirements as determined locally and usually on a case-by-case basis. Eligible families pay up to 30 percent of their income for the food stamps.

Statistical and Financial Data:

An estimated 15.8 million individuals will participate in the food stamp program during fiscal year 1975 and fiscal year 1976. Approximately 14 percent of the participants are age 60 and over, and about 10 percent are age 65 and older. Expenditures in fiscal year 1975 will be approximately \$3.9 billion, and approximately \$4.5 billion in fiscal year 1976.

Administering Agency:

The county welfare department usually administers the Food Stamp program at the local level. At the national level the program is administered by:

> Food and Nutrition Service U.S. Department of Agriculture Washington, D.C. 20250

LEGAL SERVICES CORPORATION

Authorizing Legislation:

Legal Services Corporation Act (42 U.S.C. 2996) Summary:

An ll-member board of directors, appointed by the President and approved by the Senate governs the legal Services Corporation. Through this Corporation funds are made available to persons or projects providing legal assistance to individuals of all ages who cannot afford legal assistance on their own. The Corporation also may undertake research, training, and serve as a clearinghouse for information in the area of legal services. Statistical and Financial Data:

The Legal Services Corporation was established through legislation enacted in July 1974. The legislation has not been implemented to date.

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Administering Agency:

Community Services Administration Washington, D.C. 20406

LIBRARY MATERIALS FOR THE BLIND AND PHYSICALLY DISABLED

Authorizing Legislation:

The Pratt-Smoot Act of 1931, as amended; (2 U.S.C. 135 a-b) Summary:

The Library of Congress Division for the Blind and Physically Handicapped administers a program that provides library materials and other services to persons who are unable to read conventional printed materials because of a visual or physical limitation. Library materials, including talking book machines, braille books, braille magazines, cassette players and cassettes, and special music materials, are made available to eligible participants free of charge through a system of cooperating regional and subregional libraries located throughout the country.

To qualify for participation in this program, an individual must send a statement to a cooperating library describing the visual or physical limitation which prevents him from reading conventional reading material. The statement must be signed by a physician, registered nurse, social worker, or an individual certified by the Library of Congress. Nursing homes, hospitals, institutions, and schools also may borrow materials from a cooperating library.

Statistical and Financial Data:

There are approximately 435,000 individuals participating in the reading program. Approximately 50 percent of these individuals are age 60 or over.

The appropriation for fiscal year 1975 was \$11,472,000.

Administering Agency:

Library materials may be obtained from 51 regional libraries and more than 70 subregional cooperating libraries. The program is administered by:

> 'Division for the Blind and Physically Handicapped Library of Congress Washington, D.C. 20540

MODEL PROJECTS TO PROVIDE FOR SOCIAL SERVICES

Authorizing Legislation:

The Older Americans Act, as amended, title III; (42 U.S.C. 3021

et seq.)

Summary:

Under title III of the Older Americans Act, Federal grants are awarded to or contracts are made with public or nonprofit private agencies or organizations for paying part or all of the cost of developing and operating statewide, regional, metropolitan, county, city or community model projects. Model projects are designed to demonstrate new or improved methods of providing needed services to older people.

The 1973 amendments to the Older Americans Act revised this program so that special consideration is given to sponsors who develop projects in one of five areas--housing, transportation, education, pre-retirement counseling, and special services for older handicapped individuals.

Prior to the 1973 amendments, model projects focused on alternatives to institutionalization, outreach activities to identify elderly individuals living in isolated areas, and needed services for elderly individuals living in disaster areas.

Statistical and Financial Data:

During 1974, \$16 million were earmarked to State agencies to conduct areawide model projects. During fiscal year 1975, \$7 million were appropriated to support model projects.

Administering Agency:

Administration on Aging U.S. Department of Health, Education and Welfare Washington, D.C. 20201

MULTIPURPOSE SENIOR CITIZENS

Authorizing Legislation:

The Older Americans Act as amended in 1973; title V; (42 U.S.C. 3021 et seq.)

Summary:

Title V of the Older Americans Act authorizes the Federal government to award grants to or enter into contracts with public and nonprofit private agencies to pay up to 75 percent of the cost of purchasing, leasing, repairing, or altering a facility to serve as a multipurpose senior center. A sponsor ust develop the center in an area that is in close proximity to the majority individuals eligible to use the facility and within walking distance where ssible.

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In addition, title V authorizes the Federal government to insure mortges for the acquisition, alteration, or renovation of such facilities. The artgage insurance is to be financed through a Multipurpose Senior Center urance Fund created by the Secretary of Health, Education, and Welfare a revolving fund for carrying out the insurance program.

Title V also authorizes funds for professional and technical staffing wired for the initial operation of a multipurpose senior center. The ernment may award initial staffing grants for three year periods of up 15 percent for the first year, 66 and 2/3 percent for the second year and percent for the third year.

istical and Financial Data:

The program has never been funded.

ninistering Agency:

Administration on Aging U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

NUTRITION PROGRAM FOR THE ELDERLY

orizing Legislation:

Older Americans Act of 1965, as amended, title VII; (P.L. 92-258); L.S.C. 3051)

Summary:

Title VII of the Older Americans Act provides formula grants to the States to pay part of the cost of establishing and operating programs which will deliver low-cost meal programs to older people. The programs must be located in community settings such as schools, senior citizen centers and churches accessible to the majority of elderly people for whom they are intended. The programs are to provide one hot meal per day on at least five days a week along with services which would introduce the participants to the other social resources in the communities. They also are to provide homedelivered meals to older persons in the community who are unable to leave their homes.

Statistical and Financial Data:

The fiscal year 1975 appropriation was \$125 million. There are 665 projects and 220,000 participants on each of 5 days a week.

Administering Agency:

The nutrition program is generally administered at the State level by the designated State agency on Aging. At the national level the program is administered by:

> Administration on Aging U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

OLDER READER SERVICES

Authorizing Legislation:

Library Services and Construction Act, as amended in 1973, title VIII; (20 U.S.C. 351 et seq.)

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Summary:

The 1973 Comprehensive Older Americans Services Amendments authorize Federal grants to State governments to develop and establish special library services for the elderly. Services may involve the training of librarians to work with older people; developing special library programs for the elderly; purchasing special library materials for use by the elderly; employing elderly persons as assistants in programs for the elderly; home visits by library personnel; transportation services to and from the library; and outreach programs to notify the elderly of available library services.

Statistical and Financial Data:

The program has never been funded.

Administering Agency:

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Office of Education U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

REVENUE SHARING

Authorizing Legislation:

State and Local Fiscal Assistance Act of 1972; (31 U.S.C. 1221 et seq.) Summary:

The revenue sharing legislation provides funds to States and local units of government. The State government receives one-third of the total amount allocated to a State and the remaining two-thirds of the State's allocation is divided among units of local government. States may use funds for any legal expenditure except to match Federal grants. Local governments such as cities, counties, and townships may expend these funds to provide eight categories of services, one of which is social services for the poor or elderly.

4.5%

Each unit of government receives its share of Federal funds based on several factors including the State-local tax effort, population, and the amount of poverty present in the State's population. Funds are allocated on a quarterly basis.

Statistical and Financial Data:

Reports indicate that less than four percent of the fiscal year 1974 expenditures of \$6.1 billion was used to fund social services for the poor or elderly.

Administering Agency:

Office of Revenue Sharing U.S. Department of the Treasury Washington, D.C. 20226

SENIOR OPPORTUNITIES AND SERVICES

Authorizing Legislation:

Economic Opportunity Act of 1964, as amended, title II, section 222(a)(8); (42 U.S.C. 2809 et seq.)

Summary:

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The Senior Opportunities and Services program was established in order to identify and meet the special economic, health, employment, welfare and other needs of poor persons above the age of 60 that were not being met adequately by more general programs designed for all age groups. Through this program, funds are made available, primarily to local community action agencies which, in turn award grants to public and private nonprofit agencies, for developing and operating projects providing services and activities for elderly individuals. Projects may involve employment and volunteer opportunities, referral services, neighborhood outreach programs, home day-care services, recreation programs and other activities necessary to meet the needs of older people.

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Statistical and Financial Data:

There are 200 senior opportunity and services projects serving approximately 1 million elderly individuals.

The Senior Opportunity and Services program is operating on a continuing resolution. For fiscal year 1975, \$7.5 million have been allocated for the continuation of existing projects. The fiscal year 1976 proposed budget contained requests to phase out this program in anticipation that similar programs would be funded under the Older Americans Act.

Administering Agency:

Senior Opportunities and Services Office of Economic Opportunity Washington, D.C. 20406

SOCIAL SERVICES FOR PUBLIC ASSISTANCE RECIPIENTS AND LOW INCOME INDIVIDUALS

Authorizing Legislation:

Social Security Act, as amended, title VI and title XX (42 U.S.C. 301-306; 42 U.S.C. 1361-1371); (P.L. 93-647 places social services under title XX of the Social Security Act effective October 1, 1975.)

Summary:

The Federal government makes formula grants available to State welfare agencies which in turn use these grants to establish and operate social service programs for public assistance recipients and other needy individuals who meet the income limitation requirements established by the State. Services for elderly individuals may include information and referral services, home-health care services, housing improvement services, home-delivered meals, employment services, education activities and other support services. The Federal government will pay 75 percent of the cost of a State's social service program. Statistical and Financial Data:

During fiscal year 1976, an estimated 2.7 million adults including senior citizens will receive one or more services under the States' social service programs. Federal expenditures will be an estimated \$608 million.

Administering Agency:

The program is administered on the State level through the designated State welfare agency and locally through public welfare agencies. At the national level the program is administered by:

> Social and Rehabilitation Service U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

STATE AND COMMUNITY PROGRAMS TO PROVIDE FOR SOCIAL SERVICES Authorizing Legislation:

The Older Americans Act of 1965, as amended, title III; (42 U.S.C. 3021-3025)

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Summary:

The 1973 amendments to the Older Americans Act broadened the title III program to authorize a more comprehensive social service delivery system for the elderly. Through title III, formula grants are awarded to the States to pay part of the cost of planning, developing, and operating a comprehensive, social service delivery system in the community. In order to obtain funding, the designated State agency on aging must divide the State into planning and service areas. The State agency also may elect to designate a local area agency on aging which in turn would be responsible for planning, developing and operating a social service delivery system for elderly individuals residing in the designated area.

In developing a social service delivery system for the elderly, the State agency has overall responsibility for coordinating and utilizing existing social services available on the local level. Also, the State agency may award grants to public and private nonprofit agencies and organizations for providi ; services to older people which otherwise would be unavailable.

Projects funded under title III in the past have provided for various social services on the local level such as information and referral services, home-health care services, home repair services, meal programs, transportation services, and recreation and educational activities.

Statistical and Financial Data:

As of January 1975, State Agencies on Aging identified 600 planning and service areas and established 412 Area Agencies on Aging.

The appropriation for fiscal year 1975 was \$100 million.

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Administering Agency:

State and community programs are administered at the State level by the designated State Agency on Aging. At the national level the program is adminis-

4.5%

Administration on Aging U.S. Department of Health, Education and Welfare Washington, D.C. 20201

TRANSPORTATION ASSISTANCE

Authorizing Legislation:

The Urban Mass Transportation Assistance Act of 1964 as amended in 1974

Summary:

The Urban Mass Transportaion Administration provides funds to transit companies to help cover operating costs and the costs of capital improvements. Recipients of Federal funds are required to reduce fares (not to excell onehalf of the rates during peak hours) to elderly and handicapped persons during nonpeak hours.

Statistical and Financial Data:

The Department of Transportation held public hearings in April 1975 on regulations designed to implement the Federal law requiring Federally subsidized transit systems to offer half fares to the elderly and handicapped individuals during nonpeak hours. There is \$3.975 billion available to applicants for mass transportation planning and operating expenses over a six year period.

Administering Agency:

Department of Transportation Urban Mass Transportation Administration Washington, D.C. 20201

TRAINING AND RESEARCH PROGRAMS

40%

MULTI-DISCIPLINARY CENTERS OF GERONTOLOGY

Authorizing Legislation:

Older Americans Act of 1965, as amended in 1973, title IV; (P.L. 93-29) Summary:

The 1973 amendments to the Older Americans Act authorized a program of grants to public and private nonprofit agencies, organizations, and institutions to establish or support multi-disciplinary centers of gerontology. These centers will provide for a wide range of activities such as the recrui...ng and training of personnel to work in the field of aging. Activities also will include research and demonstration projects with respect to the social, economic and psychological needs of older people. In addition, consultation services will be provided to public and voluntary organizations with respect to the needs of older people.

Statistical and Financial Data:

This program has never been funded.

Administering Agency:

Administration on Aging U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

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NURSING-HOME CARE, TRAINING AND RESEARCH PROGRAMS

Authorization:

(Presidential Directive; August 6, 1971) Summary:

The Office of Nursing Home Affairs is responsible for the training of nursing home inspectors and the inspection and certification of skilled nursing facilities participating in the medicaid and medicare programs.

The Office also enters into contracts with nonprofit organizations and associations and public agencies to provide short-term training for employees of long-term care facilities. The training programs are directed at improving the general performance on the part of the employees in giving care to patients in nursing homes.

In addition, the Office of Nursing Home Affairs is responsible for supporting studies relating to long-term care such as the quality of care provided in nursing homes, the costs of long-term care, and alternatives to institutional care.

Statistical and Financial Data:

The Office of Nursing Homes Affairs is financed through general funds appropriated to the Office of the Secretary of the U.S. Department of Health, Education, and Welfare. An estimated \$7.2 million will be expended in fiscal year 1976 to assure that approximately 17,400 nursing homes which receive Federal payments comply with medicare and medicaid regulations.

Administering Agency:

Office of Nursing Home Affairs U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

PERSONNEL TRAINING PROGRAM IN THE FIELD OF AGING

Authorizing Legislation:

Older Americans Act of 1965, as amended, title IV-A; (42 U.S.C. 3041-3042)

Summary:

Title IV of the Older Americans Act authorizes grants to public and private nonprofit agencies, organizations and institutions for training persons employed or preparing for employment in the field of aging. Grants also are awarded to public and private agencies and organizations to publicize available career opportunities in the field of aging and encourage qualified persons to enter or re-enter the field of aging.

Statistical and Financial Data:

During fiscal year 1975, 47 career training programs were sponsored under title IV-A. Also, a number of short term training programs are being supported.

\$8 million was appropriated during fiscal year 1975 for the training programs.

Administering Agency:

Administration on Aging U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

RESEARCH AND DEMONSTRATION PROJECTS IN THE FIELD OF AGING

Authorizing Legislation:

Older Americans Act of 1965, as amended, title IV; (42 U.S.C. 3031-3032)

Summary:

Title IV of the Older Americans Act authorizes grants to public and private nonprofit organizations, agencies and to individuals for establishing research and demonstration programs in the field of aging. Research and demonstration projects may involve the study of current living patterns and conditions of older persons; methods to improve the standard of living and way of life for older people; and means for improving the coordination of community services designed for older people.

The 1973 amendments to the Older Americans Act authorize the Secretary of Transportation, the Secretary of Housing and Urban Development, and the Commissioner on Aging to conduct a comprehensive study and survey of the transportation problems of the elderly. In connection with this study, Federal grants may be awarded to public and private nonprofit agencies and organizations to assist in identifying and meeting the transportation problems of older people. A preliminary study was submitted to Congress in January 1975.

Statistical and Financial Data:

During fiscal year 1974, 119 new and continuing research and demonstration projects were supported.

A total of \$7 million was appropriated for these projects.

CRS-46

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4.03

Administering Agency:

Administration on Aging Office of Human Development U.S. Department of Health, Education, and Welfare Washington, D.C. 20201

RESEARCH ON THE AGING PROCESS AND HEALTH PROBLEMS OF THE ELDERLY

Authorizing Legislation:

Public Health Service Act, as amended, title IE; (42 U.S.C. 298-d, et seq.)

Summary:

The National Institute on Aging is responsible for conducting and supporting research relating to the biological, bahavioral, and sociological aspects of the aging process and the special health problems of the elderly. Research also is conducted through the Institute's Gerontology Research Center in Baltimore, Maryland. Research is supported through grants awarded to universities, hospitals, other public and nonprofit institutions and to individuals. In addition, grants are awarded to public and nonprofit institutions for training individuals in research relating to the aging process and health problems of the elderly.

Statistical and Financial Data:

The National Institute on Aging was established through legislation enacted in 1974. Research in prior years on the aging process had been conducted by the Adult Branch of the new National Institute on Child and Human Development. The fiscal year 1975 appropriation for the new National Institute on Aging was \$16,190,000

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4.5%

Administering Agency:

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National Institute of Child Health and Human Development U.S. Department of Health, Education, and Welfare Bethesda, Maryland 20014



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE OFFICE OF THE SECRETARY WASHINGTON, D.C. 20201

AUG 4 1975

MEMORANDUM FOR THE HONORABLE PAMELA G. NEEDHAM

As requested in your communication of June 24, I am enclosing a suggested draft reply to the letter addressed to the President from Mr. Boone Robinson.

/s/ David H. Lissy

David H. Lissy Executive Secretary to the Department

Enclosure



Mr. Boone Robinson, Executive Secretary State of California Commission on Aging 926 "J" Street, Suite 914 P. O. Box 350 Sacramento, California 95802

Dear Mr. Robinson:

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Your letter of June 19 to the President regarding the direction of the Administration on matters affecting the elderly has been referred to me for response. The President is always pleased to have comments and suggestions on matters of public policy.

You may be assured that the President and this Administration are deeply concerned over the financial difficulties faced by many older Americans today. The President is making every effort to combat recession, inflation, and the energy crisis, which affect all Americans, while at the same time seeing to it that the elderly, who generally have fewer resources to draw upon than do younger adults, are helped to meet these added burdens.

You are aware, I am sure, that the President did not propose to reduce or freeze social security benefits, but to hold the annual social security benefits increase to 5% as a means of combating inflation. The actual increase was 8% effective in June and was reflected in checks received July 3. This spring, the President signed a \$22.8 billion anti-recession tax-cut bill that carried a number of provisions

Page 2 - Mr. Boone Robinson

favorable to the elderly, including payment of \$50 each to some 34 million individuals receiving Social Security, Railroad Retirement, and Supplemental Security Income benefits. Extension of unemployment compensation benefits, tax rebates for 1974, and tax reduction for 1975 are features of the bill that benefit many older persons. Also, rules concerning tax deductions for expenses of caring for an elderly relative were liberalized.

Since 1971, social security benefits have been increased several times for 120 million recipients, and the Supplemental Security Income (SSI) program has been established to maintain a minimum income level for the elderly poor.

Attention has been given to private-sector income maintenance plans. also. On Labor Day 1974, the President signed into law the Employee Retirement Income Security Act, which will offer the approximately 35 million persons covered by private employee benefit plans and their beneficiaries new protections and guarantees. ERISA encourages the growth of private pension and welfare plans, insures that participants do not lose benefits because of unduly restrictive eligibility provisions or because the plan did not accumulate and retain sufficient funds to meet its obligations, and provides greater equity in tax treatment of private savings for retirement.

Page 3 - Mr. Boone Robinson

In vetoing two bills recently passed by Congress in the areas of employment and housing, the President stressed the importance of holding down the federal deficit and avoiding exacerbation of budgetary and economic pressures. He has been particularly concerned about over-stimulating the economy and setting off another round of inflation that would be seriously harmful to elderly persons on fixed incomes as well as to nearly every other segment of society.

Last year, the President signed a historic housing bill having a number of provisions with considerable potential for older Americans--the Housing and Community Development Act of 1974. For example, Section 8 of the Act provides for subsidized housing for low-income renters, while the newly revised Section 202 authorizes direct, low-interest federal loans for construction of housing for the elderly, among others. This expanded, more flexible housing program, when fully operational, can go far toward relieving critical housing problems for many older persons.

In the critical area of health care for older persons, the Administration is working on a number of proposals and projects that should contribute to better use of present and potential resources for delivery of services to the elderly with a goal of improving health and quality of life. The newly established National Institute on Aging will not only conduct and support

Page 4 - Mr. Boone Robinson

research on the biological aspects of aging, but will examine the social and physical environment for its effect on the aging process. Mindful of wide-spread criticism of long-term care facilities for the elderly, the Department of Health, Education and Welfare is collecting data on conditions in nursing homes nationally so as to be able to recommend sound policies and programs to improve longterm care for the elderly. Also, a national rating system for nursing homes receiving Medicaid and Medicare funds is currently being developed.

Last year, the President submitted a Comprehensive Health Insurance Plan to Congress, but it was not enacted. The plan has not been resubmitted this year because of the President's desire not to increase the federal budget deficit, but it will be given highest priority next year.

Housing and health services are two of a number of areas in which the Administration on Aging (AOA), within the Department of Health, Education and Welfare, is undertaking cooperative efforts with other federal agencies. AOA which is charged with serving as an advocate for the elderly, is working with the Public Health Service and the Department of Housing and Urban Development respectively toward the better use of present and potential resources for delivery of services to older Americans.

Page 5 - Mr. Boone Robinson

There are currently several programs aimed at helping older Americans who wish to work find employment. Title IX of the Older Americans Comprehensive Services Amendments provides for establishment of parttime employment opportunities in community service activities for persons 55 years or older who have limited incomes. Under this are specialized employment programs such as Senior Community Service Projects, Senior Community Aides, Green Thumb, and Operation Mainstream. There will be at least 12,400 job slots funded in Fiscal Year 1976. Also certain ACTION programs pay a stipend to elderly volunteers who participate in Foster Grandparents and similar projects.

There are other areas in which federal activities on behalf of the elderly have increased recently. The Older Americans Act of 1965, which marks its 10th anniversary this month, is making a major contribution to the well-being of a growing number of elderly persons in the Nation. Your agency is but one of the designated agencies on aging now functioning in every State and in 412 communities, for the purpose of coordinating existing and potential resources, and providing information and referral services. The national Nutrition Program for the Elderly now serves 228,000 meals a day, five days a week. The recent action placing the annual operating level for this program at \$150 million (an increase of \$50.4 million over the previous year) will mean more elderly persons served at existing meal sites and new sites to be opened in communities not previously served. Page 6 - Mr. Boone Robinson

Under the new Title XX of the Social Security Act, funds will be available to the States that can be used for development of coordinated, comprehensive social service programs for low-income older people. The law requires that services provided be coordinated with plans for such programs as those set up under the Older Americans Act.

The Administration has repeatedly urged State and local officals on aging to make full use of federal revenue-sharing funds on behalf of the elderly. The philosophy behind the New Federalism, supported by the Ford Administration, has been to direct greater accountability to elected officials in States and localities, believing that they can best determine and solve local problems. To date, studies indicate that the States have used revenue sharing for older persons only to a limited extent. Nevertheless, health services and housing are among the areas in which some towns and counties have successfully utilized revenue sharing to benefit older residents.

It was good of you to write and share the views of the California Commission on Aging with the President. I can assure you that he gives careful consideration to such opinions in the formulation of policy affecting older Americans.

Sincerely yours,

FOR IMMEDIATE RELEASE

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July 24, 1975

Office of the White House Press Secretary

THE WHITE HOUSE

TO THE CONGRESS OF THE UNITED STATES:

I am transmitting herewith the Annual Report of the Federal Council on Aging, together with my comments and recommendations.

The Federal Council on the Aging was established by the 1973 amendments to the Older Americans Act of 1965 to advise and assist the President on matters relating to the special needs of older Americans, and for other purposes specified in the enabling legislation. Members of the Federal Council on the Aging were confirmed by the Senate on June 5, 1974.

As the annual report indicates, the Federal Council on the Aging has undertaken a number of advocacy activities pursuant to its legislated mandate. The report, as submitted to me by the Secretary of Health, Education, and Welfare for transmittal, does not include supporting data or analysis which would provide the basis for a detailed review of policy positions and recommendations.

Since the Council was only recently formed, the Administration, on behalf of the Federal Council on the Aging, has requested that the Congress authorize an extension until January 1, 1976, of the date for submission to the Congress of the two legislatively mandated studies.

One study calls for a review of the interrelationships of all benefit programs -- Federal, State, local -- serving the elderly. Such information could be useful to the Executive Branch and the Congress to identify duplicative and overlapping programs and to propose the necessary reforms so that our resources may be more effectively applied to help those most in need.

A second study, dealing with the combined impact of all taxes on the elderly, could also be helpful in determining the burdens and benefits of government actions as they affect the Nation's elderly.

I look forward to the study reports to help us provide an effective and economical delivery of services to our elderly citizens.

The Council specifically recommends "legislative action to develop high standards of safety and care in nursing homes." The Department of Health, Education, and Welfare has set high standards of nursing home care and safety that must be met by nursing homes participating in the Medicare and Medicaid programs. The enforcement of these standards is one of my Administration's highest priorities. Federal funds pay 100 percent of the costs of inspection to monitor compliance with these standards. The Federal Government pays its share of the costs of meeting nursing home standards

more

through health care financing programs, primarily Medicare and Medicaid. Financial assistance is also made available by the Department of Housing and Urban Development to assist nursing homes in meeting selected fire safety standards.

The Council also expressed its concern about the level of funding for programs to assist the elderly. I sympathize with this concern, but I am determined to reduce the burden of inflation on our older citizens, and that effort demands that government spending be limited. Inflation is one of the cruelest and most pervasive problems facing older Americans, so many of whom live on fixed incomes. A reduction of inflation, therefore, is in the best interests of all Americans and would be of particular benefit to the aging.

The perspective and recommendations of this report are limited to a particular area of interest and advocacy.

The report does not reflect the Administration's policies, which must reflect a broader range of responsibilities and priorities.

GERALD R. FORD

THE WHITE HOUSE, July 24, 1975

THE WHITE HOUSE

WASHINGTON LOG NO .: ACTION MEMORANDUM

Date: May 1, 1975

FOR ACTION: Pam Needham Max Friedersdorf Ken Lazarus Paul Theis

cc (for information):

Time: 11:30am

Warren Hendriks Jim Cavanaugh Jack Marsh

FROM THE STAFF SECRETARY

DUE: Dale: Monday, May 5

Timo: 11:30am

SUBJECT:

Administration on Aging Annual Report

ACTION REQUESTED:

____ For Necessary Action

X For Your Recommendations

.____ Prepare Aganda and Brief

For Your Comments

____ Draft Remarks

REMARKS:

X

dit .

Please return to Judy Johnston, Ground Floor West Wing

OR-PN

reco. s/1/25

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary Immediately.

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EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

MAR 2 5 1975

MEMORANDUM FOR MR. WARREN HENDRIKS

Subject: AoA 1974 Annual Report

This is in response to your request for our comments on the AoA 1974 Annual Report.

Background

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FY 1974 was a year of transition for the Older Americans Act (OAA) --making the first full operational year after enactment of the 1973 Amendments. Prior to 1973, the OAA provided support for discrete services designed to respond to particular needs of older persons in local communities. The 1973 Amendments were designed to develop a national initiative directed toward providing comprehensive systems of services which would coordinate, at the intrastate level, available and potential services and resources on behalf of older persons. Priority was to be given those planning and service areas and Area Agencies on Aging having signifcant concentrations or proportions of low-income and minority older persons. Necessary services, including nutrition, would be made available via this planning and service area

Summary of Annual Report

The report <u>provides</u> detailed information relating to major program initiatives, awards, and activities carried out in FY 1974 as authorized by the Older Americans Act, as amended. Major emphasis and detail are focused on Federal Coordination Activities, R&D, Training, the National Clearinghouse on Aging, the Federal Council on Aging, and Special Projects.

Comments

 Although the Title III (State and Community) and Title VII (Nutrition) programs account for over 90 percent of the Federal cost of the OAA, less than 10 percent of the report's narrative is devoted to what these programs are doing and assessments of how well they are doing it.

The major portion of the report is focused on the Training, Research, and Data Collection activities of AoA. Note: The Administration has never requested funds for Training, and these other functions could be considered subordinate and/or marginal vis-a-vis the high cost of Title III and Title VII functions.

(2) Minor editing is suggested in a number of instances (as highlighted in red). There are several areas where suggestive language should be modified since this is a factual report and not a proposal (see page 17). In addition, it would appear that all references to FY 1975 should be removed for the same reason (see page 19).

Recommendation

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The lack of substantive information and objective assessment of Title III (State and Community) and Title VII (Nutrition) programs is unfortunate. It is the primary reason for the Administration's attempt to hold down growth of these programs. Nevertheless, while the report is deficient in this area, we see no reason to object to transmittal of the report to Congress, following completion of the minor revisions suggested above.

Paul H. O'Neill Deputy Director

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THE SECRETARY OF HEALTH EDUCATION, AND WELFARE WASHINGTON, D. C. 20201

MAR 1 1 1975

The President The White House Washington, D.C. 20500

Dear Mr. President:

Section 208 of the 1973 Amendments to the Older Americans Act (Public Law 89-73) provides that the Commissioner on Aging shall prepare and submit to the President for transmittal to the Congress a full and complete report on the activities carried out under this Act, not later than one hundred and twenty days after the close of each fiscal year.

Enclosed herein is the Annual Report of the Administration on Aging for the fiscal year 1974. Data reflecting services and activities provided individuals under the authority of the Older Americans Act during the preceding fiscal year are included in this document.

I am also enclosing the appropriate letters of transmittal to the Congress for your convenience.

Faithfully yours.

Enclosures

Honorable Nelson A. Rockefeller President of the Senate Washington, D.C. 20510

"DRAFT"

Dear Mr. President:

Section 208 of the 1973 Amendments to the Older Americans Act (Public Law 39-73) provides that the Commissioner on Aging shall prepare and submit to the President for transmittal to the Congress a full and complete report on the activities carried out under this Act, not later than one hundred and twenty days after the close of each fiscal year.

Secretary Weinberger has forwarded the Annual Report of the Administration on Aging for the fiscal year 1974 to me, and I am pleased to transmit this document to the Congress.

Sincerely yours,

Enclosures

Honorable Carl Albert Speaker of the House of Representatives Washington, D.C. 20515

Dear Mr. Speaker:

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Secretary Weinberger has forwarded the Annual Report of the Administration on Aging for the fiscal year 1974 to me, and I am pleased to transmit this document to the Congress.

Sincerely yours,

Enclosure

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"DRAFT"

THE WELL HOUSE

ACTION MEMORANDUM

Deia: April 24, 1975

230pm Time:

FOR ACTION: Pam Needham Max Friedersdorf Ken Lazarus Paul Theis Ron Kienlen

cc (for information): Warren Hendriks Jim Cavanaugh Jack Marsh

LOG NO .:

FROM THE STAFF SECRETARY

DUE: Date: April 25, 1975 Time: noon

SUBJECT:

Necd. 4/25/75 Revised Proclamation: Older Americans Month

ACTION REQUESTED:

- For Necessary Action

Prepare Agenda and Brief

_X_For Your Recommendations

_ Draft Reply

____ Draft Remarks

___X For Your Comments

REMARKS:

de

Please return to Judy Johnston, Ground Floor West Wing

This proclamation was redrafted by HEW. You have previously cleared one routed earlier this month.

See char RN

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please Lalashan in CL. S. Cometana immediately

Seren M. Lowest

OLDER AMERICANS MONTH, 1975

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

It is gratifying to note that, throughout the Nation, there is increasing awareness of the growing national resource represented by our older citizens. Wisely focused, their collective knowledge, experience, and energy can contribute significantly to raising the quality of life for all of us in all our communities throughout the land.

I believe it is important, as we approach our national Bicentennial, that we take special note of our nation's older citizens. Today's older persons have made and are making significant contributions to the strengthening of our nation. It is fitting, therefore, that we not lose sight of these contributions, the continuing contributions this generation can make, and the commitment we have as a society to insure their needs are met.

Ment year The Bicentennial will mark fifteen years since the first White House Conference on Aging produced a Senior Citizens Charter of Rights and Obligations, and five years since the 1971 White House Conference on Aging. In the spirit of the Bicentennial, it is time to reconsider the charter, update it in the light of changing circumstances, newly defined needs and programs, and growing knowledge about the older population, and develop it as a Declaration of Rights and Obligations for Older Persons. Constitution of that now declaration by people of all ages should begin now A Ag Ad a Age is so that the suggestions for changes and additions can be considered prior to Age the suggestion of the Bicentennial Year.

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NOW, THEREFORE, I, Gerald R. Ford, President of the United States of America, do hereby designate the month of May 1975 as Older Americans Month. Furthermore, I urge that there be wide participation in observance of this month, that special emphasis be placed in these observances on the possible content of a new Declaration of Rights and Obligations for Older Persons which can become a wellying point for operations during the Bir meternet Test of 1975 and a guide to additional actions during the years ahead.

IN WITNESS WHEREOF, I have hereunto set my hand this day of , in the year of our Lord nineteen hundred seventy-five, and of the Independence of the United States of America the one hundred and ninety-ninth.

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proposal killed

March 14, 1975

Dr. Theodore C. Marrs Special Assistant to the President The White House Washington, D.C. 20500

Dear Ted:

Attached is a Memorandum from Bernie Nash to you in response to your request for our ideas concerning the April 22nd, Tuesday morning White House meeting on aging problems. We feel that such a meeting is important since it will afford an opportunity for interested persons to contribute their views directly to the White House and top government officials on steps toward solving problems faced by older Americans. I hope the attached recommendations will be helpful to you in planning for this meeting.

If Bernie or I can be of any further assistance in this regard, please call on us.

Sincerely,

Cyril F. Brickfield Counsel

Enclosure

MEMORANDUM

TO: Dr. Theodore Marrs

FROM: Bernard E. Nash

DATE: March 14, 1975

SUBJECT: April 22nd White House Meeting on Aging Issues

I am pleased to submit the following information in regard to the April 22nd White House Meeting on Aging Issues which you requested from Cy Brickfield and John Martin at your meeting on Friday, February 28, 1975.

We agree that a more extensive discussion of issues relating to the elderly would be extremely helpful and we are most pleased that you have obtained approval for an April 22nd meeting at the White House in order that interested parties may have an opportunity to air their views in regard to these issues.

Our recommendations as to the format of the meeting and a suggested list of invitees follow:

I. Invitees

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- A. Representatives of the principal organizations concerned with aging:
 - 1. American Association of Homes for the Aged (Msgr. Fahey or Constance Beaumont)
 - 2. Amarican Association of Retired Persons, National Retired Teachers Association
 - (Bernard E. Nash, John Martin, James Hacking) 3. American Hospital Association
 - 4. American Health Care Association (Dr. Tom Bell)
 - 5. American Public Welfare Association (Edward Weaver)
 - 6. Black Caucus for the Aged (Hobart Jackson)
 - 7. B'nai B'rith (Seymour Cohen)

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8.	Center for Voluntary Action (George Romney)
9.	Common Cause (John Gardner)
10.	Community Nutrition Institute (Rodney Leonard)
11.	Consumer Federation of America (Carol Tucker
	Forman)
12.	Council of State Governments (Brevard Chihfield)
13.	Democratic National Committee (Rbbert Strauss)
14.	Duke Center for Study of Aging
15.	Fleet Reserve Association (Nolan)
16.	Michigan Institute of Gerontology
17.	National Association of Counties (Bernard Hillenbrand)
18.	National Association of Retired Federal Employees (John McClelland)
19.	National Association of State Units on Aging (Harry Walker)
20.	'National Conference of Catholic Charities
	(Msgr. Lawrence Cochrane)
21.	National Council of Senior Citizens (Nelson Cruikshank)
22.	National Council on the Aging (Jack Ossofsky)
23.	National Gerontological Society (Ed Kaskowitz)
24.	National Senior Citizens Law Center (Daul
	Nathanson)
25.	National Urban Elderly Coalition (Alice Brophy)
26.	Republican National Committee (Mary Louise Smith)
27.	Retired Officers Association (Col. Danald Foster)
23.	U.S. Conference of Mayors (Alan Pritchard, Jr.)
29.	U.S.C. Andrus Center (Dr. James Birren)
Con	gressional Representatives:
1.	William Oriol, David Affeldt and John Guy Miller, /
~	(Senate Special Committee on Aging)
2.	Jack Duncan, Charles Radcliffe (Select Education Subcommittee of House Education & Labor Committee)
3.	James Murphy (Subcommittee on Aging of Senate
2.	Labor & Public Welfare Committee)
4.	A representative of the new House Select Committee
	W TONTCOOLEGETAG OF CHE NEW HOUSE DETECT COUNTEFEED

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- on Aging
- C. Governmentalepresentatives:
 - 1. Dr. Arthur Flemming Panel Chairman
 - Paul O'Neill (Office of Management and Budget) 2.
 - Caspar Weinberger & representatives (Veterans 3. Administration)
 - Representatives from ACTION, MIH (NIA), OEO, 4. Federal Council on Aging (Bertha Adkins), and FEA (Special Impact Office)

MEMORANDUM

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- 3 -

- D. Others with Special Interests in Aging Issues:
 - 1. Dr. Robert Butler, Psychiatrist & Gerontologist
 - 2. Sylvia Porter, Syndicated Columnist, Phblishers-Hall Syndicate
 - 3. Peter Weaver, Weaver Communications, Inc.
 - 4. Wendell Colton, Syndicated Columnist, Medicare Mailbox, Boston Herald American

II. Areas of Discussion

A. State of the economy

- B. Energy problems
- C. Health care
- D. Nursing Homes
- E. Age Discrimination
- F. Home health care
- G. Social Security response to Social Security Advisory Council's Recommendations - seg discrimination
- I. Housing
- J. Transportation
- K. Employment

Testimony on Physical Fitness for Older Persons

From Selected Hearings before the Subcommittee on Aging of the Committee on Labor and Public Welfare, U.S. Senate, Ninety-fourth Congress, April 23, 1975



NATIONAL ASSOCIATION FOR HUMAN DEVELOPMENT 1750 Penna. Ave., N.W., Washington, D.C. 20006 estimony on Physical Filnes

IOF Alder Dersons

From Selected Hearings outore the Sub-Committee on Aqinq of the Committee of Labor and Fullic Welfare, U.S. Senate, Name w-fourth Compress, April 23, 1975

Reprinted by the National Association for Human Development as a reference source in connection with the Model Health Education and Fitness Program for Senior Citizens, developed in association with the President's Council on Physical Fitness and Sports, under a grant from the Administration on Aging, DHEW.

TABLE OF CONTENTS

Fox, Samuel III, M.D., Cardiology Exercise Laboratory, Georgetown University 1
deVries, Herbert A., Ph.D., Director, Exercise Physiology Laboratory, University of Southern California, What Research Tells us Regarding the Contribution
of Exercise to the Health of Older People 3
Swartz, Frederick C., M.D., Chairman, Committee on Aging, Council on Medical Services, AMA 7
Radd, Anne, Project Director, National Association for Human Development 10
Elrick, Harold, M.D., Specializing in Metabolic Diseases and the Problems of the Aging, Exercise and the Aging Process 15
<pre>Klumpp, Theodore G., M.D., Chairman (Emeritus) Winthrop Laboratories; Chairman, National Association for Human Development, Physical Activity and Older Americans 20</pre>
Lamb, Lawrence E., M.D., Cardiologist, Stay Youthful and Fit 36
Ryan, Allan, M.D., Professor of Rehabilitation Medicine, University of Wisconsin, Importance of Physical Activity for the Elderly 59
Stiles, Merritt H., M.D., Cardiologist, Physical Activity and Aging 64
Butler, Robert N., M.D., Research Psychiatrist and Gerontologist, the Washington School of Psychiatry, <i>Psychological Importance of</i> <i>Physical Fitness</i> 67
Harris, Raymond, M.D., President, Center for the Study of Aging, Value of Regular Exercise Programs for Senior Citizens71
<pre>Kraus, Hans, M.D., Orthopedic Physician, Associate Professor of Physical Medicine and Rehabilitation, New York University 79</pre>
Conrad, C. Carson, Executive Director, President's Council on Physical Fitness and Sports, Physical Fitness for the Elderly 82
Fitness Program for Senior Citizens By the National Association for Human Development: Quotes from various leaders of physical fitness 93

Senator BEALL. Our next witnesses are a panel on physical fitness and the elderly.

The chairman of the panel is Dr. Samuel Fox III, Cardiology Exercise Laboratory, Georgetown University. He is accompanied by Dr. Herbert deVries, Exercise Physiology Laboratory, South Laguna, Calif.; Mrs. Ann Radd, National Association for Human Development; Dr. Frederick C. Swartz, chairman of the Committee on Aging of the Council on Medical Service of the American Medical Association; and Dr. Robert M. Butler, of Washington, D.C.

STATEMENT OF DR. SAMUEL FOX III, CARDIOLOGY EXERCISE LABORATORY, GEORGETOWN UNIVERSITY, ACCOMPANIED BY DR. HERBERT de VRIES, PH. D., EXERCISE PHYSIOLOGY LABORA-TORY, SOUTH LAGUNA, CALIF.; MRS. ANN RADD, NATIONAL AS-SOCIATION FOR HUMAN DEVELOPMENT; AND DR. FREDERICK C. SWARTZ, CHAIRMAN, COMMITTEE ON AGING, COUNCIL ON MEDICAL SERVICES, AMERICAN MEDICAL ASSOCIATION

Dr. Fox. I must report that Dr. Butler is otherwise engaged with pressing professional commitments and sent his regrets. We regret he is not able to be with us today.

Senator BEALL. You may proceed as you wish.

Dr. Fox. Thank you, Mr. Chairman, and members of the subcommittee.

It is indeed a pleasure for us to be here and a privilege to speak on behalf of this very important aspect of trying to maintain the fitness and to enhance the health and performance of our elderly citizens, and indeed all Americans so when they reach later years, they will not serve as a burden on themselves and the rest of society.

There is much that suggests very strongly that through a program of increased physical activity, we can retain their flexibility, agility, capability of getting around and being self-sufficient, and having selfrespect, which we wish them to have.

We have a panel here of experts who will speak directly to this. In addition, there are some other renowned individuals whose work is well known to many, who have written statements that support their interest and understanding and concern for this problem. We wish to submit those.

They include Harold Elrick, M.D.; Theodore Klumpp, M.D.; Lawrence Lamb, M.D.; Allan J. Ryan, M.D., and Merritt H. Stiles, M.D., a gentleman who took up skiing at the age of 55 and ended up being the chairman of the U.S. Ski Committee. His statement at age 75 is on the rewards that he personally has found with the active life.

Senator BEALL. Their statements will certainly be included in the record at the conclusion of your testimony.

Dr. Fox. My statement is very brief.

It is a privilege to appear before you as a private citizen, a resident of Bethesda, Md., although I work chiefly in the District of Columbia.

I am privileged to serve as a member of the President's Council on Physical Fitness and Sports. Previously, I have served as a cardiologist in the Naval Medical Corps and with the U.S. Public Health Service in laboratory research and later as Assistant Director of the National Heart Institute of the National Institutes of Health. Subsequently, I was chief of the heart disease and stroke control program of the U.S. Public Health Service, and, in 1970, returned to academic medicine where now I serve as professor of medicine at Georgetown Medical Center and also have an appointment as clinical professor of medicine at George Washintgon University.

In 1972 and 1973, I served as president of the American College of Cardiology, headquartered in Bethesda, Md.

In the area of heart disease, I believe we are all impressed with the overwhelming importance of the preventive approach to avoiding the physical disability, mental distress, and drain on resources that result from circulatory diseases which clearly appear to be responsive to preventive action. There is a large—and increasing—body of knowledge strongly persuasive of the important place of an increase in habitual physical activity in attempts to delay or prevent the manifestations of atherosclerosis—the clogging of arteries by fatty material which prevents an adequate blood supply reaching the heart muscle resulting in heart attack—or the brain—resulting in a stroke.

Each year, we lose two-thirds of a million Americans from heart attacks—many of them with good years of health otherwise available to them—and there is another two-thirds of a million survivors who need encouragement and guidance to return to self-sufficiency and to avoid dependence on others for their shopping, housekeeping, and other services. There are over 4 million living Americans with established coronary disease.

Over 200,000 deaths from cerebal vascular accidents occur each year in the United States and there are over 2 million survivors of strokes many cast aside and requiring assistance where, with adequate retraining programs, they could return to a rewarding level of selfsufficiency and self-respect.

It is my personal conviction from over 25 years of medical practice, research and teaching, that the maintenance of a vigorous lifestyle, including participation in such activities as country dancing, bicycling, moderately strenuous lifetime sports such as tennis, badminton, canoeing, skiing, and swimming, and useful yard work and gardening will do as much for the enhancement of general health and the improvement of the quality of life as they may for the prevention of the dread diseases.

We need to exert leadership at the Federal level to develop programs to help maintain the interest and involvement of our senior citizens in such activities. I believe we will be able to promptly document financial savings, above the costs of such programs, not to speak of the psychological and physiologic benefits that will be derived by individuals and society through having appropriate physical activity programs available and attractively continued so as to motivate persons to retain their flexibility, agility, strength, and enthusiasm.

It is therefore with deep personal conviction that I appear before you in support of the renewal of the Older American's Act with a strong request that it include specific authority for projects and programs to maintain the physical vigor and activity of our elders in their later years. I will be glad to try to answer any questions and I thank you for the privilege of appearing before you.

As you wish, sir. I will be glad to answer questions now or call on my colleagues to give their testimony. Senator BEALL. I think it might be better if we have all the testimoney and then go into questions.

Dr. Fox. Thank you.

I regret I did not follow my notes, because I have not introduced my colleagues.

On my left is Mrs. Ann Radd, of the National Association for Human Development, who will be the last of our group to testify. On my immediate right is Dr. Frederick S. Swartz of Lansing, Mich.; I would like to call on Dr. Herbert deVries of South Laguna, Calif., director of the exercise physiology laboratory on the faculty of the University of Southern California.

Dr. deVries.

Dr. DE VRIES. Thank you, Mr. Chairman and members of the subcommittee.

As we grow older, there appear to be losses in functional capacity at the cellular level, at the tissue level, the organ level, and the system level of organization. However, as pointed out by Dr. Nathan Shock, of Baltimore, the decrements in physiological functions that take place with increasing age become most readily apparent in the response of the whole organism to stress.

The exercise physiologist's interest lies in the measurement of the human organism's responses to the most physiological of stressors, physical activity. We are most concerned with the various functional capacities of the human individual and how they may be lost through aging or other processes, and how they may be improved through such modalities as physical conditioning, improved nutrition, and better relaxation.

Thus, before reviewing the evidence for the potential contributions of physical exercise to the health of older people, it is necessary to discuss some of the physiological changes which have been reported as accompanying the aging process and which collectively result in gross losses of functional capacity which the aging individual experiences as a creeping loss of "vigor."

There is a large and rapidly growing body of literature which deals with the physiology of aging. The discussion of that literature here need only be cursory, since excellent reviews are available.

As we grow older, the ability of the heart to function as a pump at rest declines approximately 1 percent per year, probably due to a lessening strength of the heart muscle. A similar loss is seen at maximal exercise. Along with this loss, the arterial blood pressure ordinarily increases and the coronary arteries gradually become plugged up, and the circulation in general slows down.

Along with these changes in the cardiovascular system, the respiratory system also loses some of its youthful capacity. The vital capacity decreases and the ability to move large volumes of air during heavy exercise declines. In general, the chest wall seems to become stiffer and breathing requires more muscular effort.

Our skeletal muscles decrease gradually in strength and in their ability to persevere with heavy workloads—endurance. Indeed, we probably lose about 3 to 5 percent of our active protoplasm—largely muscle—each decade after maturity. In spite of this loss of active tissue, however, we usually allow ourselves to gain weight as we grow older. This is worthy of note that even if we maintained the weight of our early maturity, we would still be getting fatter, since the replacement of the active tissue lost is very largely adipose tissue. While many other, sometimes more obvious, changes occur also, such as drying and wrinkling of the skin, and graying of the hair, the foregoing changes noted are most important in determining the functional capacity of the individual; that is to say his level of vigor, best measured as his capacity for oxygen consumption, sometimes referred to as aerobic capacity. By age 75, men have on the average lost about 50 percent of their maximal oxygen consumption and the data for women follow roughly a parallel course.

But most interestingly, many of these changes, particularly the loss of aerobic capacity or vigor, can be brought about in young, well-conditioned men by the simple expedient of enforced bed rest—in as little as 3 weeks. For example, in one of the better studies in this area, it was found that in 3 weeks of bed rest, the maximal cardiac output decreased 26 percent; the maximal exercise stroke volume of the heart by 30 percent; and the maximal ventilatory capacity by 30 percent; and oxygen consumption by 30 percent; and even the amount of active tissue declined by 1.5 percent.

Thus, we see that inactivity can produce losses in function entirely similar to those brought about more slowly in the average individual when he grows more sedentary as he grows older. These observations lead us to question how much of the observed agewise losses in function are truly necessary age changes and how much may be brought about by the long-term deconditioning of the increasingly sedentary life we lead as we grow older.

On the basis of the evidence presented, it may be hypothesized that the functional losses which have been observed and reported as agewise changes in the medical literature must be considered to be the resultant of at least three component factors: (1) true aging processes; (2) unrecognized disease processes; and (3) deconditioning resulting from our increasingly sedentary lifestyle as we grow older. Of these three factors, only the third is headily modified by methods presently available.

POTENTIAL FOR IMPROVEMENT OF HEALTH AND PHYSICAL FITNESS IN OLD AGE

Only a few years ago, the trainability of older people was still in question. In Germany, it had been concluded that commencement of physical training in a person unaccustomed to sport causes slight effects of adaptation after 40, while after 60 there is practically no observable effect. An article from Japan also stated that marked improvement of physical ability by training cannot be expected in older people.

On the other hand, Czechoslovakian physiologists had reported better physical performance and functional capacities in a sample of physically active older men than in a comparable sample of sedentary older men.

Two other investigators had shown significant improvement in physical working capacity and cardiac function by conditioning older people although the sample size was very small in both, 8 in one, and 13 in the other. An excellent series of investigations from Stockholm clearly demonstrated the trainability of men in the 34 to 50 age bracket. This work demonstrated a 14-percent improvement in aerobic capacity; a 13-percent increase in cardiac output, and some suggestion of decreased numbers of EKG abnormalities. However, it is difficult to consider even the upper end of this age bracket as old although the investigators did refer to their subjects as "middle-aged and older" men.

Other investigations dealing with middle-aged men have shown that vigorous exercise can reduce cardiac abnormalities and serum triglyceride levels and it is in general feasible for middle-aged men and produces changes in functional capacity and body composition that run counter to the downhill trend usually seen with aging. Highly significant reductions in the blood pressure of hypertensive middle-aged men have also been brought about in a 6-month period of physical conditioning.

Since very little experimental evidence existed regarding the physical conditioning effects upon older men and women—defined as 50 and over—it was decided to develop a mobile exercise physiology laboratory at the Andrus Gerontology Center which could be taken to a retirement community for further study. This work was supported by the Administration on Aging.

In the first experiment, 112 older males, aged 52 to 87—mean age equals 69.5—volunteered for participation in a vigorous exercise training regimen. They exercised under our supervision at calisthenics, jogging, and stretching at each workout for approximately 1 hour, three times per week.

The subjects were pretested and retested at 6, 18, and 42 weeks. The most significant findings were related to oxygen transport capacity. Oxygen pulse and lung ventilation at near maximal workloads improved by 29.4 and 35.2 percent respectively. Vital capacity improved by 19.6 percent. Significant improvement was also found in percentage body fat, physical work capacity and both systolic and diastolic blood pressure. Controls did not improve on any of the above measures.

A group of seven men was placed in a modified exercise program because of various cardiovascular problems. This group exercised in the same manner, except that they substituted a progressive walking program for the jogging and were restricted to a maximum heart rate of 120 instead of 145, which obtained with the normal group. This group was exercised for 6 weeks, at which time their improvement showed a similar pattern to that of the harder working normal subjects at 6 weeks.

Life history of physical activity was evaluated in a subgroup of 53. Neither the mean of high and low years of activity nor the peak level of activity engaged in for a period of 6 weeks or more correlated positively with physiological improvement found.

In a subsequent study, 17 older women, ages 52 to 79, from the same community, participated in a vigorous 3-month exercise program and again physical fitness was significantly improved although the women did not show the large improvement in the respiratory system shown by the men.

On the basis of a series of studies with this older subject population over a period of 5 years, during which not a single untoward incident occurred, we concluded that (1) the exercise regimen as developed was both safe and effective for normal older men and women; (2) the trainability of older men and women with respect to physical work capacity is not significantly different from that in youth in a

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relative sense, that is, the percentage gains are similar; and (3) the training gains do not seem to depend upon having trained vigorously in youth.

Other health benefits which have been reported to accrue as the result of physical conditioning of the older organism include: improved muscle strength and increased joint mobility, with respect to the muscle-skeletal system; increased total blood volume and a regression of EKG abnormalities with respect to the cardiovascular system. Also reported is a retarding effect on the typical agewise regression of lung function and aerobic capacity.

It is of interest that a general feeling of "well being" is often reported as one of the results of physical conditioning in older people. Unfortunately, this is not easily subject to scientific inquiry. However, in comparing the tranquilizer effects of a light workout—brisk 15-minute simulated walk—against a commonly-prescribed tranquilizer, meprobamate—Miltown—it was found that the workout brought about a highly significant reduction of 20 to 23 percent in nervous tension in older men and women; whereas, the meprobamate had no immediate effect. It is possible that this tranquilizer effect of exercise is the basis for the reported euphoria.

In summary, it must be pointed out that most of the data cited in support of the health benefits from physical conditioning are as yet not firmly enough grounded on repeated and corroborated experiments from independently directed laboratory investigations to constitute irrefutable scientific evidence.

It must also be recognized that the data do not allow any conclusions to be drawn with respect to the effect of the physiological benehts reported upon either morbidity or mortality statistics.

However, the weight of the available evidence at the present time does suggest that the intelligent choice of life style would include a suitably vigorous physical fitness regimen.

It is the writer's strong belief that physical fitness for old age should ideally have begun in the "earlier years" in order that maximum benefits may accrue to each individual. However, when this has not occurred for one reason or another, data are now available to support the concept of trainability even in old age. Ideally, physical fitness is a condition which should be achieved in youth, pursued to middle age, and never relinquished insofar as that is humanly possible.

Mr. Chairman, that concludes the main body of my testimony. If time permits, I would like to make a short addendum with respect to the training of personnel.

Senator BEALL. Thank you, Doctor.

Dr. DEVRIES. In view of the many benefits likely to result from the improvement of physical fitness in the elderly, it seems desirable to begin the implementation of programs in: (1) exercise; (2) nutrition; and (3) stress reduction, or relaxation procedures.

However, training of older people in these areas requires instructors with highly specialized preparation and skills. At the present time, it is the resource which is lacking.

It would appear that the highest priority should be given to the training of such leadership. Ideally, every senior center, YMCA, YWCA, and public school adult education center should have available the services of, or at least consultation with, an exercise physiologist with special training in geriatric physical fitness.

Under his direction, in cooperation with local cardiologists, grass roots leadership could be trained among both lay and physical education personnel. Centers for the training of the key leadership at the top could conceivably be easily established at those universities already having both a commitment to gerontology and interested and competent physical education personnel such as exist at USC, Michigan State, and Duke. With appropriate Government-agency funding, such programs could be implemented in a very short time. The research produced by faculty and graduate students involved in such a training program would constitute an additional spinoff of value to gerontology.

Thank you very much.

Senator BEALL. Thank you, Doctor.

Dr. Fox. If we may have Dr. Swartz's statement.

Dr. SWARTZ. Mr. Chairman and members of the committee, I am Dr. Frederick C. Swartz of Lansing, Mich., in the active practice of internal medicine in that town, and I also happen to be chairman of the Committee on Aging of the Council on Medical Service of the American Medical Association. The Committee on Aging of the American Medical Association has from the beginning considered all people in the later years to be the field of their concern.

This takes us back to the earliest concept of medicine as a profession. At the time of the establishment of the earliest university, the area of medicine was deemed to be man's relationship to nature. Using this as our platform, it can be readily understood that our interest involved every aspect of living of the oldster.

Our problem then became how could medicine be helpful in every phase of living. We have come up with many answers but this paper deals only with physical fitness.

A survey of those, at present, in the later years, both the well and the afflicted, reveals a far too great number who already present the "shaky hand and tottery gait" syndrome, or a tendency to go in that direction. It seems like a plague of feebleness, fragileness that seems to take possession of the individual. For some reason or other the spring is gone from the step. The free swinging gait is gone. Maybe from the fear of falling there is a tendency to take smaller steps and walk almost in such a crouch so that the body won't have so far to fall should that occur. It has been said that one is old because he stoops, not that one stoops because he is old.

Sometimes this picture is related to medical pathology which explains the symptoms, but most often there is no pathological lesion demonstrable. In either case, the answer is the same but to a different degree.

This syndrome of shaky hand and tottery gait is responsible in a large degree for much of the dependency of the present aged group. The treatment of this condition, varying only in degree of intensity of application, is physical exercise program. This is not a 15-minute-aday deal, but a total change of lifestyle even at this late date.

Quoting from "Physiology of Medical Practice" by Guild, Fuisz, and Botar, "Many people rank physical fitness alongside motherhood and liberty. Without motherhood, they say, there is extinction; without liberty, slavery; and without physical fitness, death." Of course they stretch the point—but it is a fact that physical fitness does add a dynamic bonus to daily living.

Physical fitness really implies more than the ability to do a day's work without running out of gas, or surviving the emergency snow shoveling or grass cutting. It is also a state of physical well-being that breeds confidence, poise, posture, physical ability, and an exhilerating feeling of buoyancy.

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Most people confuse physical fitness with the absence of disease and most people confuse activity with meaningful exercise. Most people think themselves healthy and fit when asymptomatic, without one thought about the upkeep for reconditioning of the castle God gives them in which to live.

The media makes much of the great strides in heart surgery of all kinds without ever suggesting the fact that this effort involves so small a section of our people—and their contribution casts a very small ripple on the sea of morbidity and mortality.

There are others that maintain, and with more reason, that the greatest health problem at the moment is in the area of chronic disease.

At this point, we would like to suggest that our greatest health problem is in the physical fitness of the Nation. Here the answer is the simplest and the cheapest, has the greatest application, and its reflection on the reduction of morbidity and mortality rates would be immediate and tremendous. It is entirely possible that a well-practiced physical fitness program begun early in life would increase the life expectancy by 10 years, not to mention the improvement in the quality of living in the later years.

There are many exercise programs that could be employed. None of these meet the approval of all the experts. In the daily practice of a primary physician, we are concerned with getting results. We have to instill the motivation and accept what we can that will not distract from the already over-filled life of the patient.

We have the feeling in an anecdotal way—that is, without real scientific assay with controls, et cetera—that those who participate in these physical fitness programs have fewer illnesses, a greater chance of living longer, and certainly have a greater zest for living.

Much fear is often expressed by the patient and his relatives of the possibility of injury or heart attack from an exercise program. We guard against this by beginning gently and adding new increments of exercise only when enough progress has been made to indicate that the addition is safe.

We sometimes have to point out that the only hazard-free area in this world is the graveyard. If you want to play the game of life, you must accept some risk—the possibility of a broken leg may be a small price for the chance to make a touchdown.

After the daily formal exercise program has been mastered and put into force, we proceed to institute a more strenuous program two or three times weekly. This may be typified by a walk for exercise or bike riding on a stationary bike—stationary largely because weather ceases to be an excuse for nonparticipation and the room housing the bike is usually safer than the street or highway. Improved speed, skill, strength, stamina, circulation, and range of motion should be the objective of all physical fitness programs.

To sugarcoat the exercise program one may keep occupied mentally and educationally at these times with a cassette or record of music or discussion of economics or drama or poetry or be entertained by radio

8

or TV. Most people who get about this far along with the program think they have done it all, but as we mentioned, this constitutes a complete change in lifestyle so there is more.

One of the most important items that contributes to good body function is good posture. We insist on oldsters sitting up straight in their chair, feet on the floor, and walking tall, which leads to a sucking up of the gut at all times.

All activities of living should be converted into exercise. Ambulating around the house, without lifting the heels off the floor, can be called activity, but hardly exercise. The heels should be lifted. There should be a spring in the step and at least at first the walker should be conscious of the hardening and tensing of the calf muscles. This is such an important concept in the improvement in circulation that we recommend extension and flexion exercises of the foot maximally 500 times daily to all bed patients and those unable to walk or those taking a long automobile trip.

This concept of converting all activity to an exercise level applies to all other forms of activity. Shaking the hairspray can, or the cocktail shaker or the snow shovel or the lawnmower all should be done vigorously so each set of muscles involved gets a bit of a workout.

Waste not a minute of your waking hours but use each in the effort to keep the machine in as near perfect condition as possible. This is not only aimed at muscle tone but also at agility and flexibility of the respective appendages. A concert pianist who used to practice with finger motions his coming concert while riding on an airplane is a case in point.

In our office, we follow the patient in and out of the consultation room admonishing and exhorting him to stand up straight, walk tall, stride out, don't watch your feet—you never used to—walk with a broader base by keeping the feet a little farther apart and turning on the outside foot like the soldier does. It is surprising how often and how well these requests can be complied with. Then our problem is to get cooperation of the relatives so that the program can be carried on at home.

In the car or in the rocking chair at home mild isometric exercises are recommended not only for muscle tone but limberness and agility of the parts. We realize the dangers of the Valsalva type of exertion and advise against this type effort in an exercise program or straining at stool.

We are convinced that participation in this type of program increases the confidence and a feeling of well-being for the individual and staves off dependency by preventing or softening the shaky hand and tottery gait syndrome.

The haunting question which was there from the start—if all this works to a degree in the later years, when should we really start the regime?

The obvious answer is at day one. This type of body care should be part of everyone's lifestyle for the simple reason that you feel better, you do more, you enjoy life more and in the later years, you will be independent because you have escaped the shaky hand and tottery gait syndrome.

Mr. Chairman, this concludes my statement.

I would like to add one sentence that may add a degree of credibility to what I just said; because this has been my lifestyle since World War II. I am on the job 12 or 14 hours, 7 days a week, and I just passed my 73d birthday.

Senator BEALL. Very good testimony.

What is Valsalva exercise?

Dr. SWARTZ. Take a big breath and bear down hard like this [indicating]. Do not do it.

Dr. Fox. We would like to call on Mrs. Radd.

Mrs. RADD. I am Anne Radd, representing the National Association for Human Development, with offices at 1750 Pennsylvania Avenue, NE., in Washington, D.C.

The National Association for Human Development is a nonprofit organization designed to assist the aged and other segments of our society toward the fulfillment of their social, physical, economic and intellectual needs. The principals of the National Association for Human Development include three prominent medical specialists whose professional careers span lifetimes, devoted to health care through public and private service. We are concerned about the lack of health education and information emphasizing the importance of physical activity for the elderly. This has been a serious impediment to improved health for this population and, in most instances, they are the population needing it the most.

We believe that there is a need for greater understanding of what lifestyle factors contribute to sickness and death and for identifying courses of action which may be taken to improve health. The goal, of course, is to increase the number of disability-free days in the lives of older Americans through health enhancement activities.

If we are to reduce the growing numbers of chronically ill and disabled older persons, it is critically important that we also raise the awareness of those with responsibility for carrying out programs on behalf of older persons to the role which health education can play in upgrading health and in reversing the degenerative process for older persons.

To do this, the aging population, along with the general public, must be made clearly aware of the profound difference between health information—disseminated facts—and health education—persuading people to change their lifestyles.

Most people tend to confuse health information with health education. Health information is simply facts. And facts are widely available. Health education is the process which bridges the gap between health information and health practices. Health education motivates the person to take the information and do something with it—to keep himself healthier by avoiding actions which are harmful and by forming habits and lifestyles which are beneficial.

Given their relative effectiveness in effecting change, health information has grown year by year in volume, while health education has developed much more slowly. For older persons, and in particular those who are suffering chronic ailments, the need is critical for a nationwide effort to change personal attitudes toward health and activity and to influence them to take more individual responsibility for the health of their minds and bodies by making important changes in their lifestyle factors. Unfortunately, the important and often crucial role which regular physical activity can play in maintaining health has rarely been clearly explained or adequately dramatized in the past. Based on loss of motivation and interest, and to a large extent because of the fear psychosis against exercise and exertion, older persons reduce their physical activities still further upon reaching age 60, and with especially damaging results since atrophy of disuse accentuates their lessened capacity to react to stress and contributes as a factor in the death of older persons subjected to accidents, shock, operations, deprivation, and prolonged illness. Unless older persons are motivated through health education concerning the importance of physical activity as a therapeutic measure, they are unlikely to experience any improvement in functional capability.

Studies at Duke University Center for Studying of Aging, and elsewhere, reveal that if aging persons maintain a meaningful social role, it keeps them physically active and intellectually stimulated they are motivated to take care of themselves.

These studies indicate that physical activity was the predictive factor, and that fewer illnesses and significantly fewer early deaths were noted among those who were on their feet and moving about. The studies concluded that moderate disabilities can be controlled and reversed. They also emphasized that aging appeared to be more a product of sedentary lifestyles than it was of age.

In accordance with National Association for Human Development concepts which translate research findings into action-oriented programs, we suggest that physical activity projects for older persons can be applied at the grassroots level by utilizing existing mechanisms already available and serving the needs of older persons.

Specifically, we suggest that social service activities of the 400 planning service areas be broadened to encompass regular programs for physical activity. Similarly, the approximately 600 nutrition projects could be enhanced by providing health education and a physical activity program on a regular basis.

We believe that through this approach the introduction of lifestyle changes in older persons can be effected in an amazingly simple manner; and even more important to older persons, it can fit comfortably into the normal routine of their lives. Thus, a program of physical activity for older persons properly supervised can and should benefit both the individual and society as a whole.

We propose that the language of the Older Americans Act should emphasize the importance of physical activity in social service programs for the aging, and that such programs would include regularly prescribed physical activity. We suggest that this might be accomplished by adding a subparagraph under title III, section 302(1) to read "health education designed to encourage and assist older persons to attain physical and mental well-being through regular physical activity."

I thank you, Mr. Chairman, and members of the committee, for this opportunity to testify on this important subject.

Senator BEALL. Thank you very much.

I thank all of the members of the panel.

Dr. Fox. Thank you, Mr. Chairman.

I would like to add one point that I think is quite important and well known to you. It is, we believe, important to indicate that only 4 percent of the Federal expenditures for health care go into the provision of preventive services, and we are speaking about preventive services here. We believe sincerely that the expense of efforts of the type that have been outlined would be returned to the country and the citizens by more than the expenditures involved in their implementation.

Dr. SWARTZ. May I add one thing, Senator?

In the items in title III, we have transportation, nutrition, this sort of thing. I think one has to put on a pair of glasses of physical fitness on these particular problems; because it seems to me that in providing too much transportation, we are also taking away a method of exercise. I will quote just briefly the sample of what happened to me.

A lady in a particular family lost her husband. She was sitting at home alone. She got meals on wheels offered to her. So a couple of weeks after that, I was called to the house to see her; and she had swollen ankles clear to the knees. I could not find out why she had the swollen ankles at home. She was complaining. Her daughters had to come from New York and Chicago. This was an added expense. They put her in the hospital. They found that physically she was intact. But by providing meals on wheels she stopped doing any activity. She developed swelling of both ankles.

And I think that we should look at this type of thing with glasses because sometime we may be offering something that is doing them harm. In physical fitness programs, it is extremely important in considering older Americans that we use methods that emphasize continued activity.

Senator BEALL. One of the things that concerns us as we legislate in this area, is the concern about whether we have the competence on the area agency level to make sure that proper professional guidance is being given to those who are going to be beneficiaries of this service. I am wondering what kinds of safeguards do we need to make sure that the senior citizens get the proper advice and are not asked to do things they should not be doing? Do we have the manpower properly trained across the country to implement a program, at the area agency level, that will enable us to have the proper safeguards?

Dr. Fox. I think Dr. deVries stated in his opinion, which I share, that we do not. I believe there is a large pool of interested young men and women who would find this to be a career of great interest to them. We must set up the mechanisms for training programs, workshops, and facilities, exercise evaluation, without going to the extreme that we use for the qualification of aircraft pilots, for instance, in commercial aviation; but appropriate exercise tests to be undertaken, made available, at reasonable prices, to reassure people that the programs being recommended are indeed of a very low probability of hazard.

Dr. SWARTZ. I am on the commission for the Governor from the State of Michigan which has to do with services for the aging; and I think before we get trained people, we cannot wait for trained people; I think somewhere along the line we have to start very simply. We have been trying to do this with the American physician to get him interested in talking physical exercise to all patients he sees, well and sick, in his office. This will precede getting personnel to carry on the program. But I think we cannot wait. This is very important.

rvices here. We believe sincerely that the expense of efforts of the

Senator BEALL. I am happy to hear that is done in Michigan. It has been my observation that most physicians confine themselves to providing traditional kinds of health services to the aged and do not necessarily get into recommending these other means that might be used to improve longevity or improve the general well being.

I am wondering, is there any organized effort within the medical profession to see to it that the kind of advice and recommendations you are making today get implemented?

Dr. SWARTZ. Yes. I think literature in Geriatric magazine talked to this point quite frequently. The latest one has an article on the senior olympics in California, which emphasizes the possibility of physical exertion on the part of older people, but this is an extreme case.

Dr. DEVRIES. I wonder if I may make another comment in that vein.

I think it needs to be pointed out that heroic measures are not necessary, particularly for the older individual who is not in a very good state of fitness. The challenge for him need not be that great, and even such activities as walking have been well documented to bring about available training effect.

Furthermore, I think it is important to point out that there are other aspects of physical fitness which could be implemented almost immediately after training in workshop-type situations for improving an individual's ability to relax that well, which again constitutes a part of the overall picture of physical fitness.

Mrs. RADD. Senator Beall, the National Association for Human Development recently recommended to the President's Council, and they have been most receptive in establishing a series of workshops at an areawide level that would bring these people up to speed on what kind of exercise would be appropriate for older persons; so there is movement in that direction now.

Senator BEALL. Are medical schools involved in retraining programs?

Dr. Fox. They are, sir, but not at the level that many of us feel is appropriate. But I am happy to report that there is a great deal of enthusiasm, and I think you will see a burgeoning of interest and good programs so that in a short period of years, all physicians on graduation will have an understanding of these principles and how to apply them.

Senator BEALL. I notice that most physical education training programs are directed toward physical fitness for the young. Is there any emphasis being given to redirecting the physical fitness training programs so they are directed more toward the total population and particularly toward the elderly? Obviously if you start young, you can keep it as a lifestyle.

Dr. Fox. These two gentlemen represent indeed very worthwhile efforts in that regard.

Dr. DEVRIES. I would like to believe that we are coming to recognizing the need for the older population. Certainly there has been a great deal more effort at the middle age level. I think to really implement the philosophy that we have been talking about at the level of the older individual, designated as 60 and over, is going to require New York

some agency support for the training of the competencies that are needed to supervise this on the part of both physicians and physical educators to do the job safely.

Senator BEALL. To change directions, has it been your observation that those who now have responsibility for administering the area agencies and/or the other State programs of the elderly, have an interest in and willingness to cooperate with you in your efforts to develop and implement physical activity programs for the elderly?

Mrs. RADD. I think the Administration on Aging is responding to that need right now and the President's Council has been working very closely with them. I would have to answer affirmatively.

Senator BEALL. I would like to thank you all very much. Your testimony has been most helpful.

[The following material was subsequently submitted for the record as follows:]

EXERCISE AND THE AGEING PROCESS

SUBMITTED BY: Harold Elrick, M.D. to the Senate Sub-Committee on Aging

SUBMITTED TO: Senator Thomas F. Eagleton, Chairman, Senate Sub-Committee on Aging, April 23, 1975

The following statement is based largely on research done by members of the Foundation for Optimal Health and Longevity carried out during the year 1970 to 1975.

As a person gets older, many changes take place in the body and mind. In some the changes are great, in others they are minimal. Thus, there are individuals who remain vigorous, both mentally and physically, well into their 80's and 90's, whereas many become progressively more feeble in mind and body at a much younger age. Our Nursing Homes are filled with people aged 60 to 90 years who have deteriorated mentally and physically to the point of complete helplessness.

If we examine the changes that occur with advancing age, we find a characteristic clinical picture beginning in early middle age or earlier; progressive increase in body fat and loss of muscle and bone mass, gradual loss of physical vigor, increasing levels of blood cholesterol and triglycerides, and high incidence of hypertension and cardiovascular diseases.

During the past 5 years the Foundation for Optimal Health and Longevity has engaged in research on Exercise, Diet, and Longevity to determine why some individuals and population groups are able to maintain vigor of mind and body with advancing age, whereas the majority follow the course of progressive deterioration cited above. These studies were done in Ecuador, the Caucasus, Hunzaland, and California.

- 2 -

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Population groups in Ecuador, Hunza, and the Caucasus were chosen because they had the reputation of being exceptionally long-lived. In Hunzaland and the Caucasus scientific documentation of the ages was lacking. Nonetheless, it seemed clear to us that there were large numbers of older individuals (over 75) who were exceptionally vigorous in mind and body. In Vilcabamba, Ecuador, the documentation of age was considerably better because of existence of Baptismal Records. Here we found 46 men and women over the age of 75 in a village with a population of 819. All of them were unusually vigorous, both mentally and physically.

The long-lived people in the 3 population groups cited above had several characteristics in common:

1. They engaged in many hours of vigorous physical exertion daily; primarily farming, using hand tools, and doing much up and down hill walking in the course of their work. In addition, they frequently carried heavy objects for relatively long distances. 2. Their diet was in general much lower in calories, animal (saturated) fats, cholesterol, and salt than the usual American diet.

- 3 -

3. They were generally slender, well muscled, and had a vigorous, youthful appearance.

4. Blood cholesterols (115-185 mg%) and triglycerides (50-100 mg%) done on the Ecuadorian group were much lower than that of the average American of similar age group.

5. High blood pressure and cardiovascular diseases were virtually absent.

Our studies in the San Diego area were done on 2 groups of individuals;

1. Highly conditioned men between the ages of 40 and 75. These were long distance runners who were training and competing regularly the year round at distances of 1 to 26 miles.

2. A variety of unconditioned, but normal, individuals and groups; school girls and boys aged 9-10, individual men and women aged 17-69, and firemen and policemen aged 30-50 years. These groups were tested before and after 6-12 months of special exercise and dietary programs.

Summary and Conclusions: The research studies cited above have led me to the following tentative conclusions:

1. Daily, prolonged physical activity as a part of an individual's life style is a major factor in the maintenance

of physical and mental vigor many years beyond the usual retirement age (65 or 70 years) in the long-lived population groups studied.

- 4 -

2. A diet substantially lower in animal fat, cholesterol, calories, and salt than is present in the typical American diet is an important factor in the prevention of atherosclerosis (hardening of the arteries) and cardiovascular diseases, and thereby favors increased life span.

3. The older distance runners studied by us exhibit physical and blood chemical characteristics similar to those of the long-lived population groups; maintenance of high physical and mental vigor, low incidence of hypertension and cardiovascular diseases, low blood cholesterol and triglycerides, and slender, well-muscled bodies.

4. Mental and/or physical deterioration so commonly seen in older individuals in the USA is not a part of the normal process of ageing, and therefore not inevitable. It is due to specific diseases or is a consequence of many years of insufficient use of mental and physical faculties. The "Cardinal Law" of ageing is that any body function that is not used continually will gradually be lost.

5. Properly designed and supervised exercise programs based on endurance activities appear to be a practical substitute for the physical activities which are a part of the life style of the long-lived population groups. Such programs combined with optimal diets (low in animal fat, cholesterol, calories, and salt) have been used extensively in unconditioned individuals aged 9-70 years by the Foundation during the past 5 years with success in achieving the physical and biochemical characteristics of long-lived population groups. The application of such programs to individuals of all ages under the supervision of properly qualified personnel is feasible, and wider use of the methods is recommended to increase the incidence of vigorous longevity, as well as decrease the incidence of cardiovascular diseases.

- 5 -

Harold Elrick, M.D.

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*Dr. Elrick is a graduate of Harvard Medical School and specializes in Metabolic Diseases and Problems of the Aging. He has lectured at the universities of Uppsla and Lund in Sweden; as a Research Fellow in Biochemistry at McGill University and Assistant Professor of Medicine at the University of Colorado; Chief of Endocrine and Diabetics Clinics at the UCSD Hospital. He has been an Associate of Alexander Leaf, M.D., Professor of Medicine, Harvard Medical Schools in Studies of Older People in Ecuador, Caucasus, Hunzaland and California.

Webshilitation, State of New York. Was for eight years, a member of the American Medical Association's Connittee on Scercise and Physical Fitness. Fellow, American Medical Association and New York Academy of Medicine. Has ablished numerous articles on longevity, medical research and the phannaceutical industry. R.S., Princeton inversity; M.D., Harvard University. Mr. Klumpp is Chairman, National Association for Human Seveloment.

STATEMENT ON

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THEODORE KLUMPP, M.D.

APRIL 23, 1975

Theodore Klumpp, M.D., is Chairman (Emeritus), Winthrop Laboratories; formerly president, National Fund for Medical Education. Past chairman of the Committee on Rehabilitation, American Heart Association; and member, Governor's Council on Rehabilitation, State of New York. Was for eight years, a member of the American Medical Association's Committee on Exercise and Physical Fitness. Fellow, American Medical Association and New York Academy of Medicine. Has published numerous articles on longevity, medical research and the pharmaceutical industry. B.S., Princeton University; M.D., Harvard University. Dr. Klumpp is Chairman, National Association for Human Development. There are some 50 million adult Americans who do not engage in physical activity for the purpose of exercise. That's equivalent to the entire population of France - and it was once said that 50 million Frenchmen can't be wrong. Can 50 million Americans be wrong? I think they are, and that's why we are here. But the fact that there are as many heretics as the population of all of France must inevitably have a powerful influence on us. It means that we are not just playing games but dealing with a matter that is fundamental to the health and well being of our entire nation. It is only when one is in good health and has a reasonable life expentancy that the problems of the world acquire significance. Those older Americans who are sick or about to die couldn't care less about the social, economic and political problems of mankind.

We also have a great responsibility to be sure that we are right and to know why we think our position is correct.

When I first became interested in the subject of exercise and aging during the early 1930's, the physicians of this country were almost all promoting rest in bed as the panacea for everything. Among the gains that you and I can record, and maybe take a little pride in, is the conversion of the preponderance of heart specialists to the idea that exercise is important in the prevention and treatment of heart disease. They were Johnnycome-latelys, and some of them who can't see the woods for the trees are still dragging their heels, but they are at long last on our side privately and officially and moving in the right direction. Along with this, it is gratifying to note that for the first time there appears to be a decline in the number of fatal heart attacks in the United States. This decline was recorded for the period from 1963 to 1971, coincident with the intensive public information programs of the President's Council on Physical Fitness and Sports, and the American Medical Associations's Committee on Exercise and Physical Fitness.

-2-

The pursuit of physical fitness for older Americans is not only to look better and feel better. After all, there are cultures in which obesity is admired and sought. Our own Santa Claus is a model to many of what a jolly, healthy, senior citizen should look like. And as for feeling good, there are millions of nonexercisers who think they couldn't feel any better. If obesity were merely a matter of cosmetics, we wouldn't have much of a case. No we are primarily interested in the last analysis, in avoiding the degenerative disease which shortens our lives and prematurely infirms our older citizens. Our focus must turn from health care of the aged to helping them to understand and incorporate the health enhancement factions which result from appropriate levels of regular exercise. The pathological process of arteriosclerosis or atherosclerosis is the underlying cause of the most common and serious of the degenerative diseases with which we should be concerned.

In the remainder of my testimony, I propose to discuss the role of physical activity in relation to longevity, health. enhancement and atherosclerosis.

Bor of the American Medical Association's Conmittee on scise and Physical Fitness. Fellow, American Medical poliation and New York Anademy of Medicine. His hished numerous articles on longevity, medical research the pharmaceutical industry. B.S., Princeton wersity; M.D., Marvard University. Klampp is Chairman, National Association for Human Velopment. A century and a half ago, Horace Walpole wrote these lines: "About the time I die, or a little later, the secret will be found of how to live forever." Feeling that enough time had passed to warrant a reply, Helen Bevington answered:

> "Horace, be comforted to die. One century has meandered by And half the next since, it was true, The temporal state eluded you.

-3-

Now as I read your pensive letter, I wish myself that times were better And I might boast how men contrive, As you foretold, to stay alive. By now we should possess the key To fleshly immortality And, if we wanted to, endeavor To live forever and forever. This, to my infinite regret, Is not a custom with us yet.

I write you, Horace, for good cheer Life is about as usual here."

Certainly a man as learned as Horace Walpole was not entirely serious when he forecast that someday the secret of how to live forever would be found. This no doubt is asking too much, and something that does not appear to fit into the biological scheme of things. Only the simplest unit of life, the cell, goes on sometimes indefinitely by division or budding. With this possible exception, all living things from century plants to elephants go through a cycle of growth, senescence and death.

Let us remember, the biblical three score and ten was written a long time ago, some 2500 years, before the dawn of man's scientific awakening. In this, what seems to me the greatest century of all time, we have suddenly burst the



bonds of darkness and ignorance that have tied men down as crawling creatures on the surface of the earth, and led them to early graves. We have learned to split the atom, regarded for more than 2,000 years as indivisible. We were once earthbound, and now even the earth and gravity are powerless to contain man's ingenuity and imagination. For all the gains that have been made, do you suppose the last word has been said, and the last gain realized in man's fight against disease, disability and death?

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Right now, in laboratories throughout the country, man's endurance and ability to stand adverse conditions are being tested. He is being subjected to oxygen deprivation, low atmospheric pressures, excessive acceleration and deceleration, wind blasts, prolonged confinement and darkness, and a host of other labors of Hercules. The previous measure of man's ability to endure adversity has been found to be false. In a similar way, what yardstick do we have to measure man's ultimately attainable life span? If man can't live forever, to what limit is it reasonable to expect that he might be able to survive? If anyone attempts to give a firm answer to these questions, he might find himself in the position of the Commissioner of Patents who stated in 1844, "We see the arrival at that period where human improvement is at an end."

However, we can at least approach it in another way. Let us take the age of the person known with assurance to have

lived the longest. This may be 117, or 146 for the Dane, Christen Jacobsen Bragenberg - or something even beyond that; as claimed by the Russians. From such an example, we can draw the conclusion that man has the biological capacity of living at least that long. It has been done once; why can't it be done again, and maybe again and again? That is the measure of man's endurance today. It should not be too difficult a trick ultimately for our scientists to reproduce similar external and internal conditions so that many more can be brought up to such a ripe old age - in sound body and mind. I've heard people dismiss the whole subject by saying it's heredity. Pick long lived parents. Heredity in this respect does nothing more than repeat internal physical or chemical patterns of action or reaction, or living habits, conducive to or inimical to longevity. These are also subject to modification without the necessity of invoking the Biblical injunction that "Ye shall be born again."

But prevailing records of longevity do not necessarily represent the limits of man's ultimately attainable life span. The cells of the body, with the possible exception of nerve cells, are being constantly replaced by new cells. The rate at which this occurs and its duration are determined by our glands of internal secretion. Encouraging progress is being made in our understanding of the functioning of this critically important control system of the body. There is at least a

-5-

speculative chance that it can be chemically so influenced, modified, or supplemented that the replacement of new cells will continue for a more prolonged period at the rate it occurs in youth. At the same time, we have the problem of, in some way, holding the cells of the central nervous system alive and active for a longer span. In the wondrously coordinated mechanisms of the body, the most awesome phenomenon in all of nature, it is not unreasonable to speculate that the endocrine forces that regulate the rate of cell division may also mediate the continued vitality of the cells of the nervous system, and that these controls go hand in hand, as a good engineer would have designed them to go. All this speculation has only one point, namely, to indicate to you that there is a basis for speculating that man's life span, in good health, can be extended. Indeed, as one who has been a participant in basic research for most of his life, I can tell you that people are working on facets of these very important problems. George Bernard Shaw may have been thinking of something like this when he said that modern man is not God's last creation.

-6-

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While waiting for the arrival of the millenium, shall we sit by and do nothing, or shall we utilize and apply what we think we now know concerning the aging process. This is not so simple as it may seem, because in the present state of our knowledge, there are very few facts and observations that are beyond dispute, and differences of opinion even among the experts. In the study of problems in this field, we are badly handicapped by the fact that the investigator doesn't live any longer than his subjects, and he doesn't have the advantage of observing even a single generation from beginning to end. In this respect the science of living and aging is at a particular disadvantage in comparison with other fields of medical endeavor. In order to save years and even generations of time, I believe we are justified in applying working hypotheses based on a reasonably high order of probability. This entails the risk that we may sometimes be wrong, but I have no question in my mind that it is far more desirable to give useful employment to knowledge as early as possible, and run the risk of being wrong occasionally, then to hold off until those distant millenia when everybody agrees. It was once wisely said: Nothing will ever be attempted if all possible objections must first be overcome. Let's not forget that there are people who still believe that the earth is flat. When there is something we do not understand, the best thing we can do is to turn to basic biologic and physiologic principles for guidance. With all the conflicts of opinions and impressions, the history of medical science has demonstrated over and over again that those views in accord with such basic principles will eventually turn out to have been correct.

-7-

With these considerations in mind, I would like to consider certain factors that appear to have a bearing on physical fitness and the aging process.

Arteriosclerosis, or atherosclerosis, if you will, appears

-8-

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to be the most important present limiting factor in our life span. It is far more destructive than wars, famine, pestilence and the modern automobile. It appears to be the basic pathological process responsible for the preponderance of deaths due to coronary and cerebral thrombosis, cerebral hemorrhage and adult kidney disease. It causes over a million deaths annually and the evidence indicates that the toll is rising. If things don't change, two of every three American males will die of atherosclerosis. While atherosclerosis appears and develops as man ages, there are good reasons for believing that it is not in itself the basic aging process. It is merely a deathdealing hitch-hiker that goes along for the ride. It does not occur at all in certain animals as they age. It appears not infrequently in children, particularly diabetics, and at times there is remarkably little evidence of it found in older persons who have died of some other unrelated conditions. It appears most pronouncedly in association with obesity, diabetes, severe hypothyroidism, xanthochromotosis, and other lipoid metabolic disturbances, and (we are now beginning to recognize) physical inactivity. I had a patient and a friend who was immobilized in bed for 25 years with a broken back. If anyone was protected from stress and physical wear and tear, it was he. He died, not of his broken back, but from atherosclerosis.

To throw up our hands and say that atherosclerosis is merely something that is inherited is to say nothing. The mere observation that the same change may take place in related individuals is interesting, not at all surprising and of no consequence in getting at its fundamental nature. There is a physical or chemical change that is responsible for this phenomenon, and this is what we are primarily interested in identifying.

-9-

It is a strange circumstance that disability and death from atherosclerosis should be on the increase coincident with the phenomenal advances in our civilization and standard of living, a period marked by so many other gains in health, comfort and human well-being. Some of this apparent increase is due to more accurate diagnosis and the fact that other causes of death, which have claimed young lives, have been reduced. Nevertheless, most students of the subject are convinced that the increase is real in both a relative and absolute sense. Some have ascribed this situation to the anxieties and tensions of the modern world. Unfortunately, I cannot find this explanation convincing. Since the dawn of civilization, every age has had its tensions and anxieties which, I have no doubt, have always seemed the worst ever to those living at the time. By what standard, by what instrument of precision, are we qualified to conclude that now has come the ultimate. I rather suspect that the lurking dangers of the jungle, the savage terror of the unknown, the looming threat of pestilence and famine were just as real worries in times gone by as the atomic bomb, wars, inflation, Watergate and the energy crisis are today. But more important than national or international tensions as sources of anxiety, are the personal everyday problems of the individual.

His own individual disappointments, frustrations, losses and bereavements are the more potent, real and immediate sources of anxiety, and these have been present as long as man has enjoyed the mental and emotional attributes of a human being. The so-called swift tempo of modern living has significance only in how we adjust or react to it. One man can fly at 2,000 miles an hour and feel little if any emotional stress. Another rolls along with a horse and buggy and feels as if he were flying. Indeed, were strain, tension and anxiety the critical factors in the etiology of vascular accidents, I see no reason why they should not occur more commonly in young individuals, where these forces are often at their maximum intensity. On the other hand, there is good evidence that vascular accidents are the result of atherosclerosis, and I have found no convincing explanation of the role of anxiety in the pathogenesis of this process.

-10-

But perhaps there are other factors in our civilization and way of life that should be considered as possibly having a bearing on the increased incidence of arteriosclerotic heart and vascular disease. Perhaps not all the products of technological gain have been beneficial to man. It would be surprising if they were. Our scientists and engineers have been and are increasingly on a mad rampage to develop not only laborsaving devices but every conceivable gadget to enable man to avoid effort, exertion and activity, whether it saves labor or not. We no longer tend the furnace or carry out the ashes; we drive a block for a newspaper, instead of walking, and for even this we no longer need use muscles to steer, apply the brakes or open the windows - and we are more tired than our fathers and father's fathers used to be when they ran, walked, chopped wood, shoveled snow, dug ditches, pitched hay, stoked the furnace, and did all the physical chores so abhorrent to the last third of the twentieth century.

A story illustrates my point: A father sent his son to the cellar for a screwdriver. Son: "I found the Vodka, but I didn't see any orange juice."

-11-

Have you ever seen anyone take a single step on a moving escalator? If you have, it was probably some oddball like Hans Kraus of New York, or Ted Klumpp. Heart attacks are not the result of shoveling snow or running for a train, as popularly believed. On the contrary, they are the product of a lifetime of not doing things like shoveling snow and running. It is true that an attack may occur coincident with exertion, but more than 50% of heart attacks happen while the victim is asleep in bed. And if he isn't asleep, whatever he happens to be doing at the time or in the recent past gets the blame. We are imbued with the idea, without the benefit of scientific rationale that physical exertion, particularly in the older American, is harmful. This has taken the form of a national psychosis that has swept the country like an ancient plague. We are afraid to live for fear of dying.

It was Theodore H. White who said that the history of contemporary civilization is the story of the displacement of food as the principal source of energy by coal, petroleum,

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-12-

water power, gas, and I may add atomic fission. But we go right on stoking our human furnaces as we did when brawn and muscle power made the wheels of the world go round. Does all of this carry with it a penalty in terms of the degenerative diseases, heart disease and arteriosclerosis? Fortunately, more and more of us are becoming convinced that it does. We have more laborsaving devices in this country and the highest incidence of heart attacks. Is there any doubt that there is a connection between the two?

Two important fundamental biological principles appear to have application to what we are talking about. The first is this: Tissues and functions that are not used, atrophy. There is no argument about the application of this principle to muscle tissue. The functional capacity of the heart and blood vessels is aerived from their muscular structure, and the manifestations of atrophy are clearly evident at all ages in the shortness of breath and reduction in work capacity that results from disuse. To me one of the most striking demonstrations of this is the astonishing rapidity and extend of the physical and circulatory deterioration that takes place as the result of a short period of immobilization. To my way of thinking, this has been one of the most important scientific revelations of our space flights. We did not really realize before how quickly this physical deterioration occurs. In addition to the manifest effects in terms of circulation and muscles, we know that the bones lose their calcium, joints stiffen, clots form in the

contemporary civilization is the story of the displacement of food as the principal source of energy by coal, petroleum,

32

blood vessels, stones in the urinary tract, digestion is impared, and the bowels and organs of excretion lose their functional efficiency. I have not doubt that the endocrines, in their delicately balanced interrelationship, suffer also. Immobilization in bed and in space, and its effects, differ only in degree from the immobilization resulting from our so-called laborsaving devices and present day attitudes toward physical activity.

-13-

Based on loss of motivation and interest, and to a large extent because of the fear psychosis against exercise and exertion, our older Americans reduced their physical activities still further, to the same effect, and with what I believe is especially damaging, if not disastrous results.

In addition to the consequences previously noted, atrophy of disuse accentuates the lessened capacity of older persons to react to stress. I have no doubt that such avoidable atrophy is a contributing factor in the death of older persons subjected to accidents, shock, operations, deprivation, stress and prolonged illnesses.

Aside from its functional aspects, it is a depressing thing to see what can happen to the human figure - a thing of most exquisite beauty until misshapen by fat, atrophy, bulges, swellings, protuberances, pendulosities and hernias. These are not necessary concomitants of the aging process, as the fine physically active figures of many elderly ladies and gentlemen without corsets, girdles, belts and trusses bear witness.

4

-14-

So much has been said and written about the harmful effects of stress that I am afraid we have been left with an entirely lopsided view of its biological role. It has not been made entirely clear that extremes of stress, from the standpoint of intensity or duration, are harmful. In this connection it is safe to assume that extremes of any kind are harmful. Like potent medicines, the proper dosage is beneficial and even life-saving; too much is poison. In a similar way, I look upon moderate or graded stress as necessary to the maintenance of good health, vitality, and an adequate reserve against the extremes of stress that in one way or another befall all of us. Functional capacities of all systems of the body can only be augmented through moderate stress. From this point of view, exercise may be regarded as the most beneficial form of graded stress. I have no doubt that it applies to the mind and emotions as well as to the rest of the body. This principle has, I believe, particular application to the aging process. After the prime of life, the peak of which comes at different times for the various functions of the body, a decline occurs. In my opinion this decline will proceed more slowly if the bodily functions are fully employed and, through moderate and unfortunately descending stress, they are held to their maximum capacities.

What I consider to be one of the most important biological principles has a bearing on this subject, and it is this: "Nature tends to eliminate those who have relinquished their functional usefulness." Unfortunately, nature does not appear to favor mind over matter, and the full utilization of only our mental capacities does not appear to be enough. I believe that we must do everything we can, as we grow older, to resist the inclination to slow down the tempo of our living. I am convinced that if you will just sit around and wait for infirmity or death to come along, you will not have to wait so long.

-15-

Theodore Klumpp, M.D., is Chairman (Emeritus), Winthrop Laboratories; formerly president, National Fund for Medical Education. Past

formerly president, National Fund for Medical Education. Past chairman of the Committee on Rehabilitation, American Heart Association; and member, Governor's Council on Rehabilitation, State of New York. Was for eight years, a member of the American Medical Association's Committee on Exercise and Physical Fitness. Fellow, American Medical Association and New York Academy of Medicine. Has published numerous articles on longevity, medical research and the pharmaceutical industry. B.S., Princeton University; M.D., Harvard University.

STAY YOUTHFUL AND FIT Presented by LAWRENCE E. LAMB, M.D.*

To The Senate Subcommittee on Aging April 23, 1975

Despite the obvious capacity to live well past 100 years most individuals from industrial societies do not. At birth the life expectancy for a white woman in the United States is 74.9 years; for a white man it is only 67.5 years. For nonwhites the life expectancy is 67.5 years for women and 60.1 years for men. The average life expectancy of a man who has already reached 50 in the United States is 70, but on the island of Cyprus 50-yearold men have a life expectancy of 83; in Iceland, 79; and in Sweden, 78. Since these are averages, many have longer or shorter lives. In the United States in a population of 100,000 white males aged 40 to 44 years, 1877 die each year of atherosclerotic heart disease, a complication of atherosclerotic blockage of the arteries. Atherosclerosis is responsible for many changes often ascribed to old age.

For the vast majority of individuals, the first hurdle in lengthening life is doing away with heart and vascular

Cardiologist and internist; author of numerous books on health and fitness and syndicated medical columnist in over 400 newspapers throughout the country; formerly Professor of Medicine at Baylor University. Was Chief of the Clinical Science Division of the USAF School of Aerospace Medicine for 11 years; received the meritorious civilian service award, the highest the Air Force can give a civilian, as well as the Department of Defense Distinguished Civilian Service B.S., M.D., University of Kansas. disease and cancer. It is generally believed that if satisfactory solutions to these major medical problems of modern society are found many individuals can live in good health to the centenarian mark. One should emphasize that the interest here is in increasing the active middle years of life--that is, delaying the onset of old age. Many individuals who die before their time really begin to have the things we associate with old age sooner: heart attacks in their 40's and 50's, strokes, loss of physical ability, impotence, and other manifestations of sexual decline accompanied by loss of physical prowess. 2.

Living with all of one's faculties, health, and vigor, with the full joy of living, is one thing, but to be disabled, isolated, unloved, and ill is another.

There are social problems to be solved as well as medical and health problems, if one is to enjoy a long life. Even so, it is not possible to deny the rewards of being able to live longer in good health with full vigor and as a meaningful part of one's society and environment. Aside from dreams for the future, there are solid facts to support what the individual can do to help achieve this goal now: specifically, understand the changes that occur with the process of aging, and learn how to delay the adverse changes, and maintain youthfulness and energy. It is entirely possible for most people to add years of healthy vigorous living 3.

to their life span. Usually a change in some living patterns is required, as well as the development of a disciplined personality. But the person who loves life and wants to <u>live</u> while he lives can do something about it.

Acquired Versus Time-Dependent Aging

Many of the health problems, disability, and the deterioration now associated with age are "acquired changes" rather than simply the result of the passage of time. A social attitude has evolved that because of a person's age he is expected to have these changes; therefore, they can be disregarded. <u>The simple truth is that most older people</u> <u>in our society are not just old</u>. <u>They are sick and have as</u> <u>much right to society's concern as infants or adolescents</u>. At age 70 a person may have reached only the halfway mark of the possible life span if the 50 maximal cell doublings were achieved. Many disabilities of the 70-year-old person are from acquired defects that we have not learned to prevent or cure rather than from time-dependent aging. The first step in managing these problems is recognizing that they are illnesses--not just the ravages of time.

For example, fatty deposits may plug the arteries and interfere with circulation, causing, in turn, heart attacks, strokes, and other diseases. The resulting dead heart cells, brain cells, and cells of other organs are dead because of a disease process, not because of time. Death from cancer in older people occurs because something has gone wrong in the body, not because of time. It is true that increasing age seems to decrease the body's ability to withstand these disease processes and other environmental challenges, but even that observation isn't absolute. Doctors may examine the heart of a 26-year-old man and note that it "is as old as a 70-year-old man's," and what they mean is that the changes in the arteries are as advanced as those often seen in older men; but in neither case are the changes caused by time. The occurrence of heart attacks and cancer and even early osteoarthritis in young people reminds us that we are dealing with "acquired changes."

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Because the end results of aging and of common diseases are the same, no doubt there is an overlapping between the effects of "acquired changes" and "time-dependent changes."

Disuse Factor

Certainly many of the problems noted in older people which we attribute to aging are the direct result of disuse. There is clear evidence of loss of muscle cells and decrease in size of muscles if they are not used, just as there is evidence that the amount of muscle mass can be increased with appropriate exercise, as long as the blood supply for the developing muscle is adequate. Disuse of bodily systems not only affects skeletal muscles but can affect the heart 5.

muscle, decreasing the heart's capacity. It can affect the lung's capacity and almost every bodily system. Nature seems to follow a simple principle: "If you don't use it, you lose it."

A good example of this principle is what happens in the formation of red blood cells. Everyone destroys a certain number of red blood cells every day by normal physical activity. The simple mechanical process of circulating blood causes mechanical wear and tear on blood cells and brings about this destruction. The older cells apparently are the weaker ones and are the ones usually destroyed. If an individual maintains a relatively constant level of activity, the bone marrow will form enough red blood cells each day to replace those that are destroyed. In this way the necessary balance of red blood cells is preserved within narrow limits. If a person becomes inactive, the cells are not destroyed so rapidly and the bone marrow stops producing as many. It literally becomes inactive and may take as long as three weeks to be fully reactivated when one resumes more vigorous physical activity.

There are countless examples, whether reference is to chemical systems or more obvious mechanical systems like bone and muscle, to show that the range of capacity of the human body's functions is dependent upon using it. Physical strength comes from using the body; chemical ability, from exercising the chemical system of the body. Loss of the normal range of these functions is not genetic aging; it is the body's response to disuse. Perhaps lack of activity in some way turns off some of the basic cellular mechanisms, but this is theory. In any case disuse is an important component in the weakening, loss of function, and loss of the full range of capacity of function seen so often with increasing years. Most of these changes are within the voluntary control of the individual.

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Atherosclerosis

Atherosclerosis is the accumulation of fatty deposits in the arteries. This can occur anywhere in the body. If it affects the arteries to the heart muscle, it causes heart disease; to the brain, it causes strokes; to the legs, it interferes with walking; to the genitals, it can interfere with a man's capacity to have erections or affect his testicular function; to the kidneys, it can alter their normal function. Because atherosclerosis leads to blockage of the arteries, it interferes with circulation. Cells will then be deficient in oxygen and nutrients and accumulate end products of metabolism like carbon dioxide. These adverse effects on the cells limit their capacity to regenerate and hinder their growth and response to use, thereby contributing to the disuse problem. In their extreme form they can result in cell death. Through causing heart attacks, strokes, and kidney disease and its multiple problems, atherosclerosis accounts for approximately half of the deaths in the United States. It occasions untold numbers of cases of senility because of brain damage and a host of other medical problems. The amount of fatty deposits in the arteries clearly increases with age, and it was therefore once assumed that atherosclerosis was an aging phenomenon. This is obviously a false assumption since atherosclerosis also occurs in young people, particularly in the arteries to the heart in men as young as 22 years of age and in sufficient amounts to cause heart attacks in these individuals. Nevertheless, because it increases with age, the changes it brings about are often considered as aging. They are, of course, acquired changes.

The Musculoskeletal System

We commonly think of youth as being associated with supple bodies with good muscles and strong bones capable of a wide range of physical activity and endurance. We think of age, by contrast, as being associated with loss of muscles, weak and brittle bones, and loss of body suppleness. Certainly within our framework of living patterns these concepts are true. Yet in many parts of the world older individuals continue to be physically vigorous with strong muscles, strong bones, and supple bodies. One need look no farther than the 70- and 80-year-old Africans who are tribal dancers. Many changes noted in the muscles and skeleton with age can definitely be prevented.

A System of Opposing Forces

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One of the interesting things about the musculoskeletal system is the arrangement of the muscles and their attachment to the skeleton. For the most part there are opposing sets of muscles. This feature is very important in appreciating what happens to the musculoskeletal system with advancing years. Examples of opposing muscles are everywhere. The biceps in the upper arm contracts to bend the elbow. The triceps muscle on the back of the arm contracts to straighten the elbow. The actions of these two muscle groups oppose each other. Opposing muscles bend or straighten the joints in almost every region of the body, or rotate parts of the skeleton in opposite directions. Muscles along the back help us sit or stand upright. They are opposed by muscles from the other side of the trunk which allow us to bend the spine forward. There are muscles which help us rotate the spine to the right and other muscles which rotate the spine to the left. Large muscles in the front of the neck let us rotate the head to the right or to the left. Muscles between the shoulders help us keep our shoulders back in a normal position. Muscles across the front of the chest contract in an opposite direction and tend to roll the shoulders forward, producing the rounded-shoulder effect. The state of contraction and general position of all these muscles in relation to each other are responsible for optimal posture and movement.

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The commonly observed decrease in the size of muscles with increasing age is not all time related. The muscle mass can be influenced by the amount and type of physical activity. A person with relatively small muscles can develop large muscles with a properly carried-out weight training program. Exercise which causes the muscles to have to contract firmly or against force will gradually increase the size of the muscles. Older individuals who have continued forms of physical activity that constantly work the muscles often have retained a larger muscle mass than much younger individuals who follow no physical fitness program. The range of possibility of development of muscle mass is so great that there is a very obvious overlap between the physically active older person and the inactive young person. Not that the very old person by physical activity alone can retain the maximum amount of muscular development that the human body is able to achieve. But physical activity is a major factor in maintaining muscle mass, and its absence is a major factor in failure to develop or maintain muscle mass.

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Because physical activity progressively declines in individuals with increasing years or sometimes with material success, there is a tendency toward a gradual change in body composition so that a large portion of the muscle mass is replaced with fat tissue. This is a main reason for the change in body configuration attributed to aging. It is often said that as a person gets older his chest falls. The largest

44

dimension is no longer around the chest but around the waist and buttocks.

It is intriguing to observe the decrease with age of steroid hormones generated by the adrenal gland and the sex glands that parallels the decrease in muscle mass. The measurable amounts of these eliminated in the urine decrease with age, but correlation with muscle mass shows that the same amount of the hormones is formed per pound of muscle in both the young and the old. While there is probably some inherent decrease, the question is whether or not the decrease in the hormones is associated with age or lack of physical activity. Since muscle size can be increased with exercise at almost any age, there remains the possibility that physical activity which increases size and function of the muscular system can in turn influence the master genes of the body that control the time sequence of the various cells and in so doing be a youth factor.

The War with Gravity

The commonly observed loss of muscle mass in advancing years affects some muscle groups more than others. Muscle tissue is typically lost between the bones in the hand, leading to the development of the "bony hand" of older individuals. By appropriate hand exercises these muscle groups can be at least partially maintained. Similarly, the muscle

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fibers in the arms and legs tend to shrink, so that the size of the muscles in the extremities is decreased. The loss in size and strength of the abdominal muscle results in the relaxed abdomen which is a major factor in the familiar "bay window."

The muscles along the entire spine are likely to weaken, as are those between the shoulders. These and other changes are responsible for the posture and physical appearance of the body of older people. There is a constant battle against gravity to maintain upright posture. As the muscles weaken, the battle is lost and the body begins to sag. Just as an old tree gradually bends to the earth, the human body bends more and more; its muscles can no longer keep the skeleton in its optimal, upright position.

As the muscles become less and less able to maintain the constant state of semicontraction necessary for proper alignment of the spine, the spine bends forward, decreasing the normal tension on the abdominal muscles. Visualize a bow and its string. The bow is the spine; the taut string, the abdominal muscles. If you seize the bow by both ends and bend it or curl it, the tension on the string is released and the string becomes slack. So it is with the abdominal muscles. As the spine inclines forward, it relieves the tension on these muscles and they become slack. Abdominal muscles that remain strong add support to the spine and reduce a great deal of the wear and tear of weight on the spine and spinal muscles. Thus in this sense they work together.

As the weak muscles between the shoulders lose their tone, they remain stretched even in the resting state. The muscles across the front of the chest (pectoral muscles) then contract or their fibers shorten, so that the shoulders roll forward. The end result is a combination of muscles in the front of the chest which are contracted, unable to stretch to their usual length, and muscles across the back of the shoulders which are weakened and overstretched. Clearly, correction of this type of problem involves treatment of both muscle groups, the relaxation and lengthening of those across the chest and the strengthening of those between the shoulders to provide normal shoulder position.

In addition to the changes observed in the spine, the joints begin to bend at hip and knee just as if they were giving slightly under the constant load of carrying the weight of the body. The flexed positions of the hips and knees contributes to the loss in height associated with increasing years. Maintaining the optimal range of capacity of the muscles will go a long way toward maintaining proper positioning of the hips and knees for optimal body posture. The tendons at the joints also shorten as the muscles remain contracted. The Achilles tendon in the ankle, for example

shortens, decreasing the mobility of the ankle. Regular stretching of a joint helps retain normal tendon length.

The elbows and wrists also tend to be slightly bent, and keeping their full range of motion is likewise an important aspect of preserving youthful vigor. The body makes constant adjustments to maintain balance as it loses the battle against gravity. Factors which influence the legs and spine gradually reach up to affect the neck and head, since the head must balance on top of the spinal column. The changes in the musculoskeletal system just described cause the head and neck to thrust forward a little. The face itself changes. If the muscles are not used frequently, the face may become impassive, and there is likely to be frequent blinking of the eves.

The changes in body posture are not solely muscular. Degeneration of the spine, associated with the degeneration of the disks between vertebrae and actual dissolving of the bones, causes fractures of the spine, deformities of the vertebrae, and other derangements which magnify the problem. It cannot be emphasized too strongly that once these changes have become extensive it is impossible to reverse them. Therefore a preventive program for the musculoskeletal system must be established early in life. Since the formation of bone--and, indeed, its destruction-is frequently a long-term process, such a program should be initiated early and followed vigorously. As skeletal changes occur, underlying medical problems often become more important. These include such things as having one leg shorter than the other (which causes the pelvis to tilt and the entire spine to be canted out of position) and old injuries of any type which have affected the skeletal system. The loss of normal muscle strength alone is a major factor in the frequent occurrence of backaches, and these of course are common even in young people, who also may have weak muscles. The overall preventive program for the musculoskeletal system is invaluable even in the early years in preventing backache.

Exercise

There is a lot of truth in the saying "If you don't use it, you lose it." Exercise or physical activity is a means of preventing disuse. Disuse is a major factor in causing many of the changes in the body we call aging. Physical activity is essential to maintain the strength and function of the musculoskeletal system, including bone and muscle mass. Bones that are not used tend to decalcify. If a leg is put in a cast, the leg bone loses calcium, and, of course, the size of the muscle also decreases.

As muscle mass shrinks, the amount of vital hormones declines. The amount of steroid hormones from the adrenal gland and sex glands diminish with age, but in proportion to the decrease in muscle mass. It is not definitely known whether increasing

14.

the muscle mass will increase the amount of hormones and what the overall effect will be upon the body. It is known, however, that the muscle mass can be increased in middle-aged, inactive people by appropriate exercises. With an exercise program, there are many medical indicators of improved health and well-being. It is possible that the level of physical activity is a significant factor in maintaining optimal functions of the endocrine glands to provide lifegiving hormones for continued youth and vigor.

Patterns of muscle movements are integrated with the nervous system. The finely coordinated movements of the concert pianist, for example, respond to a memory pattern in the brain or to a visual stimulus which is processed through the brain. Or again, if a leg is removed, the nerve cells related to its function undergo changes. There are numerous other examples to illustrate the interrelations between the musculoskeletal system and the nervous system. It is well known that a stroke or damage to the central nervous system can cause a leg or any portion of the musculoskeletal system to cease functioning properly. Conversely, the functions of the musculoskeletal system affect the memory organization and fundamental patterns of response, ultimately

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resulting in a chemical reorganization within the nerve cells.

Although there are many gaps in our knowledge of the interrelated functions, it has been established that the musculoskeletal system and its function are linked to the functions of both the nervous system and hormone production. The nervous system and endocrine system likewise influence each other. Thus, the musculoskeletal, nervous, and endocrine systems are synchronized, and physical activity influences all three.

Work for the Heart Muscle

Exercise assists in maintaining optimal function and health of the heart and circulation. It must be used properly. Physical activity requires that more oxygen be delivered to the working muscles. Transporting this greater amount of oxygen is the job of the heart and circulation. It's easy to understand, then, that physical activity makes the heart pump more blood or work harder. The capacity of the heart to pump blood is increased by working it, just as the strength and size of any other muscle in the body are improved by using it. A distance runner needs to develop not only the muscles in his legs but the strength and capacity of the heart muscle to pump enough blood for him to run. Individuals who undertake very little physical activity do not allow the optimal capacity of their heart

16.

and circulation to be achieved.

The Vital Artery Network

Proper physical exercise increases the circulation to the heart muscle by developing the network of small arteries between the two main arteries to the heart. This network is important in providing adequate blood flow to the individual muscle fibers. In the healthy physically fit individual the network is extensive, and during vigorous physical activity it enables large amounts of blood to be circulated to the working heart muscle fibers. In the absence of a well-developed network, the amount of blood siphoned to the heart muscle, and hence the work capacity of the heart is limited. A well-developed network also helps to protect the heart from the effects of blockage in any one branch of the artery system by a buildup of fatty deposits. In fact, if an artery is blocked in one spot and the individual survives, the network to detour blood around the blocked artery is further developed to provide a new blood supply to this area of the heart muscle.

The increased circulation to the heart muscle brought about by exercise not only helps protect one from a heart attack but also improves his chances of surviving a heart attack if it occurs. The greater vascularity of the heart muscle is comparable to that noted in the skeletal muscles. If these are exercised and developed, the circulation to them is increased. Increase in Volume Capacity of the Heart

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Adequate amounts of proper exercise will also increase the volume capacity of the heart. Remember that the heart is a muscular organ and acts as a reservoir for blood between beats. If the heart has to pump more blood, it actually starts enlarging its chambers so that more blood can be stored for each beat. This is a normal healthy response. It is similar to the increase in volume of the lungs that can be induced by breathing exercises. If a heart has a very small capacity, its ability to increase the amount of blood it can pump is limited, and consequently the amount of oxygen that can be delivered and the amount of physical activity that one can do are limited too. Clearly, the volume capacity of the heart is an important factor in a person's ability to perform strenuous or lengthy exercise. In individuals who are free of significant blockage in the arteries to the heart muscle it is probably the single most important factor controlling the amount of physical work that can be done.

The heart does sometimes enlarge with disease, but this is a compensatory mechanism to try to overcome some mechanical defect in the heart. For example, if a valve to the outlet of the heart is partially obstructed, the heart has to work harder to eject blood past the obstruction. In essence the heart is worked and it enlarges accordingly. The normal increase in size and capacity of the heart with physical

19.

exercise in healthy people is a healthy finding and shows optimal heart function. An indicator of this is the heart rate. The individual with a relatively rapid resting heart rate is likely to have a small heart with limited capacity. The healthy individual with a normally slow heart rate probably has a heart with larger capacity and a greater range of function.

Circulatory Efficiency

Physical fitness increases circulatory efficiency. That is, the heart and circulation of a person in good condition do less work for a given physical task than those of a person in poor condition doing the same task. Both may use about the same amount of oxygen if the task really requires the same amount of energy, but to deliver that oxygen in the unfit individual the heart has to pump a great deal more blood; thus there must be an increased blood flow to the heart muscle. The reasons are not entirely clear but are undoubtedly related to the small arteries that channel blood to the different parts of the body. In the wellconditioned athlete a major portion of the blood pumped by the heart is sent directly to the working muscles and a smaller portion of it is sent to muscles that are not being used. In this way the maximum amount of oxygen can be withdrawn from the blood pumped by the heart. Many complex mechanisms exist in the body that provide for transporting the increased amount of blood pumped by the heart directly

to where it is needed as opposed to sending it equally to all parts of the body.

Exercise and Atherosclerosis

Of course exercise influences the heart and circulation indirectly through its metabolic effects. To the extent that exercise decreases obesity and lowers the amount of fat particles in the blood, it helps to prevent the buildup of atherosclerosis which causes blockage of the arteries. It therefore improves the circulation all over the body -in the legs, the kidneys, the testicles, or wherever. Since atherosclerosis can even affect the balance and hearing mechanisms, to the degree that exercise prevents atherosclerosis, it can help maintain optimal function of the ears. Whenever one loses body weight, he also finds it easier to engage in a lot of normal physical activity without overloading his heart. The excess fat that a person carries around is truly an extra weight. Obviously the man who walks a mile carrying 50 pounds of excess fat must work harder, and his heart must pump more blood and work harder too. If the heart has a limited capacity because of disease or other factors, getting rid of the extra 50 pounds of fat means the body has to work less during that mile walk and the heart has to work less. Even an individual with limited capacity of the heart can walk more after he has lost excess fat than he could before and still not overload his heart.

To the extent that exercise induces fat loss, it will improve exercise capacity whether or not the work capacity of the heart is increased.

Blood Pressure

Exercise tends to affect the small arteries throughout the body which are important in regulating blood pressure. Either through the exercise activity itself or through associated fat loss, changes occur in a number of individuals that result in a lowering of their blood pressure at resting conditions. During exercise the blood pressure normally goes up. In individuals in poor physical condition it usually goes up more rapidly than in those in optimal physical condition. Thus, exercise is often a useful adjunct in treating people with elevated blood pressure.

Breathing Capacity

Just as exercise requires the heart to pump more blood, it also requires the lungs to provide more oxygen. Increased breathing exercises the lungs and helps maintain lung capacity. Not only are the lung sacs themselves filled and emptied rapidly during moderate exercise, but the muscles in the chest wall that are responsible for expanding and contracting the chest cavity are also put to more vigorous use. There is a considerable body of evidence to suggest that regular, adequate amounts of exercise help keep up the functional capacity of the lungs.

Blood Formation

The level of physical activity influences the body's capacity to form red blood cells. Each day a small number of red blood cells are destroyed as they succumb to the wear and tear of being tumbled through miles of blood vessels. The greater the physical activity, the more rapidly the blood circulates, and consequently the more red blood cells are destroyed each day. These are replaced regularly by the bone marrow and blood-forming organs of the body. With regular levels of physical activity the blood-forming organs produce the same amount of red blood cells that the body destroys. Thus the number of red blood cells is kept in fairly constant balance.

During periods of long inactivity, red blood cell destruction decreases and the blood-forming organs cease to produce as many red blood cells. They become relatively inactive and sluggish compared to their state in a very active individual. I observed this effect in studying many healthy young men placed at bed rest to evaluate the probable influence of weightlessness during space flight. When the men got out of bed and resumed normal physical activity, the old red blood cells which had accumulated were suddenly destroyed. The bone marrow had become accustomed to producing a small number of red blood cells and was unable immediately to replace the destroyed cells. As a result most of these young men tended to develop a sudden anemia caused by resuming normal physical activity. In the course

of three to four weeks of normal physical activity the bone marrow would regain its level of productivity and a new balance would be established. At this point the anemia would disappear.

In other studies--of dogs--the bone marrow was found to be yellow, filled with fat, and inactive in caged dogs not allowed to exercise. Dogs exercised regularly developed a rich, red marrow characteristic of active blood cell production. Exercise is apparently important in maintaining optimal bone marrow function.

Summary

I am pleased to have the opportunity to present this statement because I am sure that the government can help a large number of older people to see the values they can gain for their health with a good fitness program. I am confident that if older Americans could be educated about the healthful aspects of exercise the demands for health services could be sharply reduced. We have a lot of smart older people, and they are capable of helping themselves, if given the knowledge. If our society can learn to live better and maintain fitness in its broadest sense, people will not suffer from many of the medical problems we attribute to old age.

replace the destroyed cells. Asymptomicleoptichethedensizene young set tended to develop a sufdem anemia caused by resuming normal physical activity. In the course

IMPORTANCE OF PHYSICAL ACTIVITY FOR THE ELDERLY

SUBMITTED BY: *Allan Ryan, M.D. to the Senate Sub-Committee on Aging

SUBMITTED TO: Senator Thomas F. Eagleton, Chairman, Senate Sub-Committee on Aging

Physical activity brings life and inactivity leads to death. This is hardly a new concept, but one which we as a nation seem to have to be reminded of at least every 50 years. We talk about physical fitness as if it were something we invented rather than a quality that we had almost lost sight of 20 years ago. Thanks to a series of sharp reminders from the President's Council on Physical Fitness and Sports, and from the dedicated physicians and others who have supported the Council's work, we have steered a sizable proportion of our people back on the track towards keeping themselves more physical y fit.

In the rush to get on the bandwagon, however, we have left a significant group of our people -- the great majority of our senior citizens -- somewhere behind. True, we have "Masters" and "Seniors" programs going on now in a number of sports, and we see some outstanding examples of men and women in their seventies and on up who are remaining active in vigorous and demanding physical activities. But these - 2 -

are only a small portion of the millions of older persons who could benefit from being involved in active physical exercise but instead are languishing in apartments, rest homes and other dwellings where they seldom get any vigorous activity at all. B

Why should it be important for older persons to exercise vigorously? Haven't they run their course, and don't they deserve a rest? When a man or woman stops working, we say that he or she is "retired," signifying a withdrawal from occupation, but too often it means a withdrawal from life. Physicians know that the body functions decay when they are not called upon regularly. Herodicus, who preceded the great Hippocrates 2500 years ago, exercised his patients vigorously to restore their health when they had been ill and advised them to exercise regularly to keep from falling ill again. It is easy to measure the decrease in the size of a muscle when it is deliberately or accidentally immobilized. The heart enlarges and strengthens itself when stimulated by vigorous exercise but shrinks and weakens in its force when its owner become inactive for too long.

But shouldn't the elderly be more cautious against overexertion, since many have some chronic infirmity which might be aggravated by too vigorous exercise? Galen warned his fellow physicians 1800 years ago that it was meaningless to speak of a perfect state of health, since no one of us could be said to enjoy it. Rather, he said, we should think in terms of our ability to be active and to be useful to ourselves and others as a measure of our state of health. Even the physically handicapped person need not be considered in poor health if he can participate actively in life. In fact, there is no better way for him to improve his health.

- 3 -

Rather than encouraging the senior citizen to a life of vigorous activity, our society has tended to push them out of the mainstream and into the backwaters where they drift in a desultory fashion, lapsing into a gradual decline which leads inevitably to a hospital, a convalescent home and eventually to a death which may be untimely. They pay the price with their lives, and society pays in hundreds of millions of dollars for medical and ancillary care services.

It is a mistake to assume, however, that the elderly have an entirely free choice as to whether they will remain vigorously active or not. Besides these barriers of ignorance and lack of motivation which they set for themselves, there are others even more formidable which many of them are in no position to overcome. Lack of funds, an inhospitable environment, lack of facilities, inadequate transportation, and lack of trained supervision and leadership are the chief of these. Localities and states, already heavily burdened with costs for educating the young and providing welfare and

61

60

medical assistance for people of all ages, have not met and perhaps cannot meet, the costs of surmounting these barriers to greater physical activity for the elderly. Here is where the Federal Government may play a role.

- 4 -

What is needed is to put to work the knowledge and experience of those in the fields of health, physical education and recreation. We must have sufficient funding to make available to older persons the programs, leadership and facilities which will enable them to become involved on a year-around basis in physical activities which will help to keep them healthy and mentally alert, thus increasing their independence and perhaps even prolonging their lives.

Outdoor programs should be available throughout the year, and in many cases this would not necessitate new facilities. In the northern tier of states, however, there would be a great need for large multi-purpose indoor facilities whose use would be restricted to the older age group.

The Federal Government could forward these purposes by making grants to localities, states and other public and private agencies who would agree to plan, staff and maintain such programs and facilities. Within a relatively few years, such grants would more than pay for themselves by reducing the heavy expenditures for medical and para-medical services for which the Government is now liable. The medical evidence that this could be so is already available but will not be cited here in the interests of brevity. Failure of the Government to act in this matter will only result in the costs of care for the elderly continuing to mount steadily.

- 5 -

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PHYSICAL ACTIVITY AND AGING

by Merritt H. Stiles, M.D.*

To The Senate Subcommittee on Aging April 23, 1975

The relationship between physical activity and the aging process has long been recognized. Many physicians have noted that their healthier older patients, particularly those in their late seventies, eighties and nineties, are almost without exception, unenthusiastic persons who are still young in spirit. It is a moot question whether they are active because of their enthusiasm, or enthusiastic and interested because of their activity. The two characteristics unquestionably go hand in hand. It may be significant that if one of these healthy older individuals is compelled to remain inactive for a prolonged period, by accident or illness, deterioration will set in and a steady downhill course will ensue unless the individual can be stimulated to return to the greatest degree of activity possible.

Studies have shown a gradual but progressive deterioration in physiologic function associated with chronologic age. This applies to the maximum oxygen uptake, the maximum heart rate, the vital capacity, the metabolic rate, and numerous other functions. Yet there is some question as to whether these changes are the result of age alone. One study suggests that the decline in maximum heart rate is related to the decline in metabolic rate, rather than of age itself. Other observations have suggested that if an active exercise program is pursued, the maximum oxygen uptake loes not decline, or decline s much more slowly.

Granted that exercise may be a factor in slowing the deteriorative changes of the aging process, how vigorous should exercise be? While we lack a definite answer, there is a growing feeling that the "moderation" which the medical profession has preached so long, may not be the final word as far as exercise in the conditioned individual is concerned. Professor Wildor Hollman

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of Cologne University has recommended five minutes of daily exercise at from seventy to seventy-five percent of capacity, a degree of exercise hardly to be called "moderate." Dr. Thomas K. Cureton, of the University of Illinois, believes the average adult should get from 300 to 500 calories worth of exercise a day, equivalent to from 30 to 50 minutes of jogging or skiing, again hardly moderate.

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What type of exercise is best? Suffice it to say, there is general agreement that the most important forms of exercise are those which stress the heart and lungs. To accomplish this, the body's largest muscle masses, the legs, must be used vigorously. Brisk walking, climbing stairs, hills, or mountains, jogging, running, cycling, swimming, and skating, are all excellent, particularly if practiced vigorously and regularly. Even dancing, if practiced with sufficient vigor and frequency, and for long enough periods, may be beneficial. Gardening, particularly if digging is involved, can be beneficial too.

Sports such as tennis, squash, kayaking, sculling, horseback riding all provide excellent exercise, and are enjoyable. Skiing qualifies as an unusually desirable form of exercise. Being both vigorous and sustained, it is particularly beneficial to the heart and circulation. Yet the effort required is usually only 25 to 40 percent of maximum, with frequent interruptions to view the scenery, converse with a friend, rest one's legs, pick one's self up after a fall, or ride a lift to the mountain top for another run. In addition, it is fun, so much fun that exercise becomes a pleasure and not a duty.

Since exercise on a lifelong basis seems essential if a person is to enjcy life to the fullest, it behooves him to pick out a sport or form of exercise which he enjoys, and then practice it regularly as long as he is able. Should his choice be a seasonal sport, like skiing, he will need to find substitute activities for other seasons. Resistance exercises weight lifting, and muscle building exercises in general, do little for the heart and lungs, however, they do have a positive role in muscular develoµment and in specific athletic skills. When used in corjunction with other training programs, they may serve a useful purpose, such as in training for competitive skiing. When used unwisely, however, by inadequately conditioned individuals, unfortunate consequences have sometimes developed. It should also be stressed, however, that it is not advisable to go from a life of relative inactivity to any form of active exercise without going through a gradual period of training during which the tempo and vigor of exercise are gradually increased.

In summary, it may be stated that, unfortunately, the average American of mature years, male and female alike, has allowed himself or herself to deteriorate into a state of physical unfitness. The young adult male often works under too much stress, with prolonged hours, with too little recreation and with no exercise, frequently associated with heavy cigarette smoking, too much alcohol, overeating and resultant overweight. Can such a person reverse this unfortunate downward course? I believe it is possible, providing he has sufficient desire, and providing he is willing to restore himself and devote as little as one percent of his time to regular, healthful exercise.

edentary, not seguing in physical exercise. Substituted evidence supports the value of exercise in molesiming health, improved eliculation and supplication, better sleep no minimizated eliculation following the rink of beart attack no emences survival following as strand. Swimping, welking. The rewards to be gained by those willing to exercise vigorously and regularly are great. Physical inactivity is a most important factor in the development of what has been called the Twentieth Century Epidemic, coronary heart disease, responsible for nearly 40 percent of all deaths in the United States. Physical inactivity is also a primary factor in development of overweight and obesity, and to some of us, at least, it seems to be a primary factor in the premature onset of the aging process. Cardiologists recommend a low fat diet, weight control, abstinence from cigarettes, and control of high blood pressure, in addition to exercise as means of controlling coronary heart disease; many cardiologists feel that active regular exercise is the single most important factor; and cardiologists in general are possibly the nation's most regular and dedicated exercisers. It seems reasonable to believe that these same factors which help control coronary heart disease, may also be important in delaying the onset of the unhappy consequences of the aging process.

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To be truly effective, exercise must be most vigorous and sustained, and, once the individual is in suitable condition, part of it perhaps should be close to the individual's maximum ability. It must also be regular, the more regular the better. During building up and improvement phases, exercise should, if possible, involve from thirty minutes to an hour daily. Once an optimum stage has been reached, fitness can be maintained by a lower degree of activity, possibly as little as sixty minutes a week. Any form of exercise or sport sufficiently vigorous to fulfill the conditions outlined above should prove satisfactory. It must be remembered, however, that a person who has gotten soft from inactivity, or from illness, should not plunge immediately into a full blown exercise program.

If I may introduce a personal digression, with twenty years of active exercise behind me, I am, at seventy-five, in infinitely better health as well as fifty pounds lighter than I was at fifty-five. During the winter months, if I can get in two or more cays of skiing per week, I feel that no additional exercise is necessary. During the spring, summer and fall, when skiing is out of the question, I jog two miles daily, three or more days each week. Kind friends occasionally ask me if, at seventy-five, I am still skiing. My answer is, of crurse. I was late in getting started, and I have a lot of missing years to make up for. Besides, I am trying to follow in the footsteps of Herman Smith-Johannsen, better known as "Jackrabbit Johannsen." Jackrabbit is still an active crosscountry skier at the age of one-hundred, and I have another twenty-five years to go before I can equal his present records.

MEMORANDUM TO:

FROM:

Senate Sub-Committee on Aging Senate Committee, Labor & Public Welfare

Robert N. Butler, M.D., Research Psychiatrist & Gerontologist, The Washington School of Psychiatry Consultant: Health, Social Retirement, Research Planning and Services.

SUBJECT:

The Psychological Importance of Physical Fitness

Seneca, the Roman philosopher, said, "Man does not die, he kills himself." There is no question but that much of our behavior over which we can exercise some degree ci control is nfluential both in the quality and length of our lives. Yet we do not take personal responsibility either for ourselves individually or collectively as a society by shaping our lives into the kind of regimen that would enhance both the character and length of life.

Poor diets, overeating, smoking, physical inactivity, excessive drinking, the overuse and misuse of drugs, accidents, stress and life-endangering life styles are all targets of preventive medicine. One can see interrelations between these elements and many physical conditions. A graphic example is found in the work being done on the influence of personality and life styles on heart attacks.

"Exercise is the closest thing to an anti-aging pill now available. It acts like a miracle drug, and it's free for the doing," writes researcher Josef P. Hrachovec. Yet about 45 per cent of adult Americans -- 49 million of 109 million men and women are sedentary, not engaging in physical exercise.

Substantial evidence supports the value of exercise in maintaining health, improved circulation and respiration, better sleep and diminished stress. Exercise reduces the risk of heart attack and enhances survival following an attack. Swimming, walking, The Psychological Importance of Physical Fitness

running and bicycling are especially god and inexpensive forms of exercise, since they actively strengthen the circulatory and respiratory systems.

-2-

Age need not be an impediment to bicycling and other forms of exercise. Tolstoy learned to ride a bike at age sixty-seven. Paul Dudiey White, President Eisenhower's physician, urged bicycling as a preventive and curative exercise. Nineteen seventy-two sow the sale of 13 million bicycles in the United States, exceeding the sale of American and foreign automobiles by some 2.4 million. It is estimated that about 18 million Americans now ride bicycles, both as recreation and as a form of transportation. By 1973 there were at least five bills before Congress to appropriate money or land or both to provide safe and separate bicycle paths, special lanes in traffic, shelters, parking facilities and traffic control devices. Bicycles with side wheels can be used by older people who worry about balancing but want the exercise. A basket on the back makes it easy to carry packages, and the bicycle can be used for going distances too long to walk.

Spectator sports hold a large place in American life, with college and pofessional sports centering upon a few well-exercised athletes.* The same money might better be spent on programs and facilities that encourage physical exercise for the population as a whole. Health clubs and the YMCA and the YWCA could offer programs tailored to older people. The large amounts of public park space presently gobbled up by golfers could be more equitably divided among hikks, swimmers and other sports enthusiasts. The Psychological Importance of Physical Fitness

Exercise must be planned on a routine daily basis. One simply must take time for it. In addition, advantage must be taken of spontaneous opportunities for physical activities. Emptying the trash, mowing the lawn and walking upstairs instead of taking the elevator should follow a redefinition of what is called drudgery and what is exercise. So-called labor- and time-saving devices may reduce physical fitness. Gardening is a fine hobby as well as an attraction that gives pleasure to others. It saves money to garden, cut the grass, pull weeds, do household chores. Purchase of a handyman guide for work around the house can lead to exercise and save repair costs too.

-3-

Dancing is an activity that combines social, intepersonal and physical pleasure. Folk dancing, square dancing and ball room dancing should be part of the available repertoire. The rugged outdoor life -- hiking and trail blazing -- is also valuable for older people.

Medical monitoring of exercise is important in later life. Regular physical exams and discussions of appropriate exercise with a doctor can lessen the chance of overdoing or miscalculating one's abilities. Treadmill electrocardiac surveillance (including testing under stress) is very valuable. Education around common dangers is another imperative. For example, in 1970 the Federal Trade Commission warned the elderly and inform to be careful about sauna and steam baths because of adverse effects of rising body temperature, blood pressure and puls: rates. There is evidence also to suggest that isometric, statis or overly sustained exercises mey elevate blood pressure to the point of provoking a heart attack.

^{*}Tronically, athletes may have shorter life spans than average. See, for example, "Longevity and Cause o." Death among Harvard College Athletes and Their Classmates," <u>Geriatrics</u>, October, 1972.

The Psychological Importance of Physical Fitness -4-

Sexual activity is a useful form of exercise for the relief of tension, mild tuning-up of circulation and muscles and for emotional well-being. Massage is another very helpful technique, especially crucial for the bedridden, but relaxing and stimulating for all.

The Administration on Aging and the President's Council on Physical Fitness have collaborated in an excellent booklet on maintenance of physical fitness, "The Fitness Challange in the Later Years" (1968); (Reprinted, 1973).

As a physician, psychiatrist and gerontologist, I urge continued federal efforts in this vital aspect of the health care of older Americans -- physical fitness. I regard this subject of such importance that I included its discussion in a chapter <u>The Gift</u> of <u>Life</u> in my book <u>Why Survive?</u> <u>Being Old in America</u> (1975).

Robert N. Butler, M.D.

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THE VALUE OF REGULAR EXERCISE PROGRAMS FOR SENIOR CITIZENS

Presented by RAYMOND HARRIS, MD* To The

Senate Subcommittee on Aging

April 23, 1975

As a physician actively engaged in the treatment and care of medical problems of older Americans, I am firmly convinced that regular physical exercise can play a major role in preventing the onset of premature aging. I find that more than half of the patients who consult me complain of symptoms and other difficulties which they mistakenly attribute to the aging process. However, as a geriatric cardiologist researcher and physician, I find that the majority of their problems are the result of a chronic state of muscular and cardiovascular unfitness. Hypertension, hardening of the arteries and other circulatory disturbances are evident in patients with a long-standing history of physical inactivity and emotional stress and

*President of the Center for the Study of Aging; Clinical Associate Professor of Medicine, Albany Medical College; Chief of Cardiology, Sub-Department of Cardiovascular Medicine, St. Peter's Hospital and former Vice President of the Gerontological Society. Dr. Harris is the author of <u>The</u> <u>Management of Geriatric Cardiovascular Disease</u>, a member of the Physical Health and Education Committee of the National Jewish Welfare Board, and President of the Albany Jewish Community Center. Sec.

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tensions that could have been relieved by regular physical activity.

Properly taught and prescribed physical exercise programs are particularly valuable and practical for delaying the changes of aging and the progression of organic musculoskeletal and circulatory diseases. People who have become habitually sedentary in their living and thinking often overeat, thereby laying the groundwork for conditions which stimulate the development of organic disease. I refer specifically to complaints of aches and pains in joints and muscles, low back strain and transient illnesses of the cardiovascular system such as labile high blood pressure and coronary spasms.

Impaired mobility in middle-aged and older people, often the result of poor physical fitness, leads to social isolation, personality and emotional deterioration and poor mental health. Physically inactive people past 50 perceive their bodies to be broader and heavier then they really are and they experience bodily activities as increasingly strenuous. Kinesthetic pleasures which young people derive from motor action are steadily reduced in habitually sedentary elderly subjects who eventually become reluctant to move at all. Muscular degeneration, distinct physiological changes and distortion of the body image resulting from restriction of physical exercise lead to greater clumsiness, increased fear of physical activity and the development of faulty feedback mechanisms between movement and body image. Inactive older people develop increased internal tensions and pent-up aggressions.

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Physical activity is valuable in promoting the health of older people. Regular physical activity increases the outlets for the discharge of aggressive energy and neuromuscular tensions. Such activity aids mental health by improving the older person's self-image and the relationship of one's self with the environment. By improving muscular tone, circulation, energy, work performance, mental and physical work capacity, physical stamina and body weight, physical fitness programs initiate a process of adaptive rejuvenation which can reverse much of the atrophy of muscles, joints and other organs and tissues caused by disuse. Such disuse atrophy probably causes some of the signs of apparent early aging.

Physical activity is particularly important in preventing the effects of hypokinetic disease, often mistakenly attributed to aging rather than the true cause--lack of physical activity. As people age and become physically inactive and unfit, their flexor muscles shorten and antigravity muscles supporting the body and straightening joints weaken. Such weakness of the back and shoulder muscles produces a humpbacked appearance which further limits the amount and type of physical activity which older people can perform.

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-4-

Properly performed exercise can delay and retard a major portion of these changes in the musculoskeletal, respiratory and cardiovascular systems. Exercise and training programs started in youth and continued throughout adulthood may delay or prevent these changes. However, even when these changes have occurred, partial improvement in posture and organic function may be obtained by older people if supervised exercise routines are followed conscientiously for extended periods of time.

Physical activity also opens up new challenging interests, goals, skills, experiences and abilities. It increases the independence of older people. Physical activity performed in groups also permits an experience which changes people's attitudes and behavior and improves their interpersonal relationships.

Proper calisthenics and stretching exercises have been shown to improve vigor, vitality and zest in middle-aged and older people when they are done under properly supervised and qualified instructors. Such types of exercise are valuable medically to improve the musculoskeletal system and eliminating the complaints so frequently found in elderly inactive people.

Programs should also include jogging, walking and sports which improve the cardiovascular fitness of middle-aged and older people and which have been shown to improve the circulation to the brain, heart and other organs. Physical exercise and relaxation programs can do much to improve the mental and physical health of older Americans by increasing the flexibility of their thoughts as well as their muscles. Being in better shape mentally and physically, the older individual will be able to better meet the stresses and strains of daily living and the socioeconomic problems of old age. Exercises that increase the fitness of older Americans also increase their quality of life. There is no reason for our citizens to become physically debilitated and confined to wheelchairs and beds so early in life.

In my practice as a physician and geriatrician, I have found it useful to demonstrate and describe various types of exercises to improve the functional conditions of aging Americans. Of particular help are exercises to build up antigravity muscles and improve posture to prevent functional deformities. Increasing numbers of studies attest to the value of physical exercise in improving simple reaction and discrimination time and other slowed central nervous system responses, many of which have been attributed to the aging process but which really represent the growing physical unfitness of older Americans because of inactivity. Elementary as it seems, too many older people have forgotten what it is to walk properly and be aware of the feeling of good health. They have come to accept as inevitable the feeling of tension, stiffness and pain as an accompaniment

-5-

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of the aging process. Whereas, in reality, most of these changes are due to the shortening of muscles, fibrotic changes and decreased function of joints and muscles as a result of not being adequately used or used incorrectly. As a result, functional postural changes eventually produce the false stereotype of the older person as a stooped, kyphotic, shuffling, senile individual.

Physical exercise programs that encourage older Americans to be more active, independent and mobile, provide economic benefits by reducing medical problems and hospital costs. Group exercise programs at all ages assist people to acquire new friends, new interests and lead to better mental and physical health.

Physical activity and exercise furthermore provide a structured time relationship for older people that enables them better to cope with a potentially threatening environment. Physical fitness that improves their kinesthetic sense, self-image and reduces psychologic tension is essential for their good mental health. The rationale of exercise and activity programs in geriatric day care centers is based upon helping older people to rejoin society and thereby to feel better mentally and physically. Ludotherapy (treatment by games) is useful to help the aged person who exhibits a tendency to disengage from the world and society. Kinesitherapy, associating the mobilization of the muscles with a psychological stimulation of recovered movements, tends to renew the body image and improve physical relations with the environment.

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There is need, in my opinion, for the expenditure of federal funds for non-profit programs in physical exercise and activity to motivate normal middle-aged and older Americans to begin programs which pay attention to their physical, emotional and social needs. Furthermore, funds are necessary to provide continuing education for physical educators and other professionals concerned with exercise in aging Americans. They need to be more aware of the needs of normal older Americans and how to conduct programs to keep aging Americans in good physical fitness and normal mental health. There is also a need for the accumulation of scientific data from physical exercise programs to determine the best way of retarding the symptoms and signs of the aging process and improving the quality of life and health of older Americans.

In summary, it is my position, as a physician concerned with diagnosing and treating older people, that proper physical activity has a great deal to contribute to the health of people. These programs afford great opportunities to reduce the emotional tensions, lack of physical fitness and personal crises that afflict many older people after retirement. Physically fit elderly people can care better for themselves and

April 23, 1975

remain more active in the community and stay out of institutions. Effective patterns of physical activity established during youth and middle-age and followed into cJd age provide a structured time relationship for older people. Physical activity and exercise programs leading to physical and cardiovascular fitness are useful preventive measures that will keep aging people healthier and happier and reduce the ever-mounting costs of growing old.

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In summary, it is my position, as a physician concerned erather eracy (ab oittained of a subject of the subject one which disposed and treating older people. What proper physibes which and treating older people. What proper physiccal activity has a great deal to contribute to the bealth of geople. These programs afford great opportunities to reduce the emotional tensions, last of physical fitness and parameter the emotional tensions, last of physical fitness and parameter grants afford and subjects of propertunities to reduce the emotional tensions, last of physical fitness and parameter crises that afflor many older people afford restrants. Physically fit elderly people can care better for themselves and cally fit elderly people can care better for themselves and

78

MEMORANDUM

TC: Senate Committee, Labor and Public Welfare Sub-Committee on Aging

FROM: Hans Kraus, M.D. 465 Park Avenue New York, N.Y. 10022

It is an honor for me to have the opportunity to present a statement for your committee and I wish to commend you for taking the time to consider the important topic of physical activity for elderly people. There is no more important aspect of life nor one which has been more neglected than physical and mental vigor through exercise.

Studies in the field of therapeutic exercises have convinced us that many disabilities and neuromuscular tension syndromes are due to underexercise.

The mechanized way of our lives has created the "substrength individual" who, at the same time, becomes the "supertense person."

The substrength individual compares to the well-exercised one as follows: The physically active individual has low neuromuscular tension, low absolute and relative weight, low blood pressure, low pulse rate, greater adrenocortical reserve, greater vital breathing capacity.

The physically inactive individual shows signs of aging earlier in life. He exists physiologically at a lower potential and is less well equipped to maintain homeostasis and to meet daily stresses. This low level of function, combined with enforced suppression of the "fight and flight" response, enhances the incidence of disease. If physical activity drops below a certain minimum, weight increase becomes unavoidable unless caloric intake is stringently restricted.

Dr. Kraus, an internationally recognized orthopedic physician, from New York has been an Associate Professor of Physical Medicine and Rehabilitation at New York University. He is the physician whose research on youth physical fitness and report to President Eisenhower resulted in the establishment of the original President's Council on Youth Fitness - 2 -

We are the victims of cur ecology. From the quiet of the countryside where we had to use our bodies in hard work for our daily bread we have moved to overcrowded cities with persistent noise and irritations and mostly to an entirely sedentary way of living. Lack of exercise, combined with over-irritation, are disease producing factors. Not only do we get weak through lack of use of our bodies, but we get tense and stiff by sitting and by being unable to respond to the constant irritations by bodily action. Our cardiovascular system and our lungs deteriorate in the measure they are not used. It is for this reason that the interest in physical fitness has become of increasing importance. We are here referring to the faculty of body and mind to meet the daily demands of living and still have some reserve for possible emergencies.

Good physical fitness work should actually start in childhood and should include daily exercise classes of at least an hour in every elementary school. These should continue throughout the whole school and academic life. Business and industry should set aside time for exercise breaks rather than for coffee breaks. Reconditioning centers should be established as has been done abroad for many years-where people who are getting "deconditioned" and prone to one or more of the chronic degenerative diseases have an opportunity to rest, get reconditioned, and return with healthier bodies and a more placid frame of mind.

Such reconditioning centers have shown excellent results. In one study it was shown that morbidity two years after one month of reconditioning was cut in half as compared to two years before. In spite of this and a steadily mounting proof of the value of systematic reconditioning particularly for older citizens, not one such center has been established by state or federal government in the country. No pilot efforts to explore the effectiveness of such programs.

This need is becoming more critical as an increasing percentage of the population is in the over 60 age group. There must be education for these citizens to understand the need for regular physical activity in their lives and motivation for them to want to be active. Ofcourse,

of Payetan sectors and manufattation at new for university. He is the physician whose research on youth physical fitness and report to President Sisenhower resulted in the establishment of the original President's Council on Youth

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the vital need is the availability of programs in which they can participate. These opportunities must be convenient for them and must be conducted by exercise leaders with adequate training and with an understanding of the older citizen.

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United States Senate

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PHYSICAL FITNESS FOR THE ELDERLY

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Statement by

C. Carson Conrad Executive Director President's Council on Physical Fitness and Sports

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Submitted to

Subcommittee on Aging

Committee on Labor and Public Welfare

United States Senate

May 6, 1975

country. No pilot efforts to explore the effectiveness of such programs.

This head is percentag more stitled as as intradices percentage of the population is in the over 60 age grave. There must be education for these dilicens to understand the need for regular physical activity in their lives and activation for them to want to be believe. Generates Regular exercise can significantly delay the aging process by inhibiting the losses of vital capacity, muscular strength and joint flexibility which are characteristic of the middle and later years. It is a fundamental law of physiology that the functional efficiency of an organ or system improves with use and regresses with disuse.

Regular exercise may deter the onset of degenerative diseases which are among today's major killers, and it may improve the ability to survive and recover from heart attack by promoting the development of collateral circulation in the heart muscle. The growing conviction that incidence of disease may be reduced among physically active persons is supported by the commonplace observation that enforced idleness often is the prelude to early incapacitation for the elderly.

A state of physical fitness enhances the quality of life for the elderly by increasing their independence. The ability to "go places and do things," without being dependent on others, provides a strong psychological lift which is conducive to good mental health.

Physical fitness programs approved on an individual basis by physicians can and should play an important role in efforts to improve preventive health care for the elderly. Many forms of exercise involve little, if any, expense for participants, and it would be a relatively simple matter to improve the availability and accessibility of exercise facilities in most communities.

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The medical profession accepts a strong role in preventive medicine for physical fitness programs. The recent transfer of the President's Council on Physical Fitness and Sports to the administrative apparatus of the Public Health Service is in itself recognition of this fact. The PCPFS, the American Medical Association and the American Heart Association conduct joint programs designed to inform physicians and the public at large about the relationship between exercise and health.

The public's perception of physical fitness as an aspect of health, and changes in the Council's perception of its role, also support a role in preventive medicine for fitness programs. The Council was established 19 years ago as an agency concerned exclusively with youth fitness, but its major emphasis now is on physical activity for middle-aged and older Americans. This emphasis has had an effect. When questioned in a recent national survey, more than one-half of those adults who exercise said they do so "for reasons of health." In terms of physical fitness, the elderly are a "needy" segment of our population. They grew up during a period when it was expected that one's work would provide all the exercise that was required, and when there was no national emphasis on physical fitness. Relatively few of the elderly have extensive experience in physical education and/or sport, and fewer still possess the skills to enjoy swimming, tennis, golf and other popular participatory activities. And they have little understanding of the human need for physical activity.

3.

The problem is one which merits attention and we believe we have an obligation to deal with it. Doing so will strengthen both our nation and our national health care system.

There is authority at the present time for the Department of Health, Education and Welfare to encourage and/or establish programs of physical activity for

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the elderly. Some emphasis has been directed to this concern through the Administration on Aging and the President's Council on Physical Fitness and Sports.

I. What can be Done under Present Legislation and Regulations

The authority to develop needed programs in Physical Fitness for the Aging exists at the present time under the following two agencies:

A. <u>Title III of the Older Americans Act of 1965</u>, <u>as amended</u>

1. Title III is a Federal-State formula grant program, which has as its overall objective, the development or strengthening at the sub-state or area level, of coordinated, comprehensive service programs for older persons. A wide range of services are identified in the law which may be provided or coordinated under this program, including the following which could include physical fitness components:

> -health related services -preventive services -recreational services -any other services determined to be necessary for the general welfare of older persons.

2. Section 308 - Model Projects

The purpose of this discretionary project grant program is to enhance the scope and quality of services provided to older persons, and in general to demonstrate ways of promoting the well being of older people. The law provides that the program emphasize certain areas of concern, including meeting the needs of the physically and mentally impaired elderly. Therefore, a model project designed to demonstrate how physical fitness programs could improve the wellbeing of physically or mentally impaired older persons could be funded under this program.

B. <u>The President's Council on Physical Fitness</u> <u>and Sports (PCPFS)</u>. Executive Order 11562 established the Council and determined its responsibilities under the Assistant Secretary for Health, Department of Health, Education and Welfare. The Council is charged with the promotion and improvement of the Physical Fitness of all Americans by the following:
1. Enlist the support and assistance of non-governmental individuals

7

and groups in efforts to promote and improve physical fitness and sports.
2. Stimulate, improve and strengthen coordination of Federal services and programs relating to physical fitness and sports.

6.

- Encourage state and local governments to enhance physical fitness and sports participation.
 - Seek to strengthen the physical fitness of American children, youth and adults.
- Develop cooperative programs with medical, dental and other similar societies to encourage and implement sound physical fitness.
 - Stimulate and encourage research in the areas of physical fitness and sports performance.
- 7. Assist educational agencies in developing quality programs to encourage innovation, improve teacher preparation and strengthen state and local leadership.

II. What is Being Done at the Present Time

As noted, physical fitness programs can be supported under Title III of the Older Americans Act, but State and Area Agencies on Aging must determine if such activities fall within the priorities established by the needs surveys that are required as part of State and Area Plans on Aging. For example, West Virginia initiated a physical fitness project for the elderly under Title III in Charleston in 1970, and the project was so successful that the program (which is now supported through a variety of sources), operated by the Laurence Frankel Foundation, has expanded until it is now offered Statewide, in Senior Centers, Nursing Homes and State Hospitals.

The PCPFS and Administration on Aging prepared the booklet, <u>The Fitness Challenge...in the Later</u> <u>Years</u>, which was published by the Administration on Aging. There has been a heavy demand for this booklet.

The PCPFS is charged to promote and improve the physical fitness of all Americans. In carrying out this mission, the PCPFS through its own resources and with no relation to the Older Americans Act has:

A. Included leadership training through workshops in each of the six Regional Clinics on Physical Fitness and Sports conducted by the Council each year. Such workshops will be conducted in Toledo, Ohio; Newark, Delaware; San Juan, Puerto Rico; Las' Cruces, New Mexico; Lexington, Kentucky; and Detroit, Michigan during FY '76.

B. Provided emphasis on exercise and physical activity for older Americans as part of the on-going public information/advertising campaign. For example, Lowell Thomas was recently featured on six radio spot ads which went to 4,000 radio stations.

C. Produced the film, <u>Physical Fitness for Older</u> <u>Americans</u>, in which the Council's Executive Director interviewed Lowell Thomas on the subject of the importance of exercise programs for the aging. The film is available on free loan for use in training sessions for exercise leadership.

> D. Provided State leadership training workshops on physical fitness for the aging.

E. Co-sponsored each year with the Center for the Study of Aging, Albany, NY, the national conference on "Fitness After Fifty."

9.

- F. Provided articles on exercise programs for the aging for popular magazines and professional journals.
 - G. Conducted the Presidential Sports Award program which is offered in 39 sports and through, which adults, including older Americans, are encouraged to participate regularly in their favorite sport.

SUMMARY

The Department of Health, Education and Welfare has a strong commitment to support the concept that the older people of America have a right to opportunities and benefits similar to those available to other segments of society. Many of the concerns for the elderly are the same as for other groups. However, the elderly do have unique characteristics, needs and interests which necessitate different programs and emphasis. These facts are particularly prevalent when considering the health aspects of physical activity.

The efforts described above have been well received and have had some influence, but have only touched the

91

surface of the potential for improving the health and well being of the elderly through physical activity. There are economic values in addition to the personal physical and psychological value of improved health through improved physical fitness. Any efforts by the federal government to lessen the cost of medical care or other social services should be vigorously pursued and the Department will continue to explore these avenues under existing authority.

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& tread Prograde for Series Atylnd (a model Project of Rational Serger) The Wat'l assess for Human Development The Presidents Connect on The Presidents "I. A. Pilot Demonstration"

"...approximately 49 million men and women do not engage in physical activity for the purpose of exercise.

These sedentary Americans tend to be older, less educated, and less affluent than those who do exercise. Due to the failure of these aging citizens to participate in physical and mental impairment ... In the opinion In physical and mental impairments... In the opinion of medical gerontologists, much of this impairment can be prevented by a schedule of exercise activities." <u>Introde Frederic Schedule</u> Opinion Research Corp. <u>Connect Constant</u> President's Council on of the Constant Frederic Schedule of Physical Fitness in a continue to function mentally and physically in

is to continue to function mentally and physically in every respect. Proper nutrition for older persons is important. But it is not enough and of itself will not acheive optimum health and wellbeing for the aged. Equivalent in importance is the necessity of opposing decline and atrophy at any age through mental and physical activity and exercise. Atrophy of disuse is the greatest enemy of the aged."

Dr. Theodore G. klumpp (cardiologist and advisor to The President's Council on Physical Fitness and Sports)

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"...a study of cardiovascular disease showed that there are reductions of blood supply brought on by aging: and more so, in those who are physically inactive. Both exercise and dietary corrections are linked to lessened cardiovascular system, it balances energy cycles within the body and is a benefit to organ and 1.111 endocrine function in addition to the obvious conditioning of the muscles and connective tissues. There is still a myth that mental activity invariably decreases rapidly throughout adult life, as a consequence of aging... I hold that this is not caused by aging but by inactivity."

Dr. Hardin G. Jones University of California at Berkley

"The talk used to be all diet and exercise. Today it is exercise and diet.

Dr. Frederick J. Stare Harvard

"While the need and demand for improved health servises have been using (the report states), health education by either the public or private sector has been shock-P.IV ingly neglected --- a failure to heed the opportunity

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to help themselves to have better health. The aging population along with the general public must be made clearly aware of the profound difference between health information (disseminating facts) and health education (persuading people to change their lifestyles). The distinguished members of the President's Committee Health Education strongly emphasized the need for a nationwide effort to change personal attitude toward health and physical activity."

Report of the President's Committee on Health Services

Certification of Instructors for Geriatric Services "the only risks and/or discomforts (to participating human subjects) will be those involved in physical exercise. We have not experienced any negative effects

p.61 with regard to the subject's physical, psychological, sociological wellbeing as a consequence of such activities in six years of project work along these lines."

"... exercise and testing programs we used resulted in a mean improviment in aerobic capacity of 29% which was accompanied by other improviments in health status such as lowered blood pressure and

better ability to relax as measured by resting muscle action potential level. This improvient in health and viggr was accomplished without so much as a syncopal episode over the four years of our experience in this area."

HEALTHY ADDED YEARS

Edward L. Bortz. M.D. (President, American Geriatric Society) 1961 Reperted From the 1961 Rentancica Book of the York (one proje notice) "...medical science does know with a high degree of

"....medical science does know with a high degree of certainty that these (cardiovascular) diseases are susceptible to control through prevention and practice of proper diet and living habits and through regular and thorough medical checkups."

"It has been estimated that more than 12,000,000 persons in the United States, an overwhelming percentage of whom are in the over-45 age group, are striken with arthritis or rheumatism. Medical science had no certain clues to the causes of these ailments, but again researchers are convinced that to glarge extent they will prove finally susceptible to control through sensible health habits and precautions."

"The cellular activity of the skeleton is dependent on endocrine function, nutriment and osteoporosis as the result of disuse has been widely observed. Evidence now at hand indicates that the brittleness of the aging skeleton can to a large measure be controlled by diet, exercise and glandular supplements." "Physical fitness can be defined as the ability of the body to take strenuous exercise with a minimum change in body dynamics from the resting state."

"While performance capacity diminishes with advancing age, these experiments show that training can improve performance in older bodies. The more a muscle is kept alive, the better its ability to perform. These observations point to the advisability of aging people maintaining their muscular equipment in good tone. Lack of exercise, it would appear, invites atrophy, a condition synonymous with decrepitude of old age."

> BUSINESS WEEK "The New Rx For Better Health"

"Exercise strengthens the heart's collateral circulation. And exercise has been proven to reduce blood cholesterol levels."

Dr. Warren Guild Harvard Medical School

"Four to six outings a week, of at least 30 minutes each, is a reasonable level of activity to be attained and continued by an over-40 executive, the specialists say. A gradual buildup, of course, is mandatory."

BEYOND DIET - EXERCISE YOUR WAY TO FITNESS AND HEART HEALTH

"Physical fitness, actually cardiovascular fitness, is an observable and predictaale benefit of exercise training The fit individual has endurance or stamina, and he is able to supply more energy to his muscles so that they can work harder and longer, and with less

that they can work harder and longer, and with less effort, than when he was not physically fit. Thus, when fit, the exerciser puts less strain on his cardiovascusar system. He feels better, sleeps better and supposedly has improved digestion and disposition."

".. populations maintaining a customary high level of occupational and receeational physical activity and avoiding excessive amounts of saturated fats, have low heart attack rates. Research in progress also documents mounting, although not yet conclusive,

p.7 evidence that an exercise training program can probably decrease your chances of sustaining a heart attack or having another if you have already been stricken. Furthermore, if you have a heart attack at all, it will probably be milder if you are physically fit. The American Heart Association has taken the position that it is at least "prudent" to exercise." 1 4

"Some risk factors are actually diminished by exercise training. For example, there may be a beneficial lowering of both blood pressure and heart rate so

p.7 that the heart needs less oxygen. Exercise also changes the clotting power of the blood so that it is less likely a clot will form on the lipid plaques in the coronary arteries (heart attack).

"... Despite the fact that exercise training does not seem to stop hardening of the arteries, it does appear p.7. to render the artherosclerotic process less apt to lead to a heart attack."

WHY EXERCISE? Southeast Request Clause on Hypere determined on Hyperest de States and April 1. States and the section, "...an attack (heart) may occur coincident with exertion, but more than 50% of heart attacks happen while the victim is aslcep in bed.'

"Functional capacities of all systems of the body can only be augmented through moderate stress. . From this point of view, exercise may be regarded as the P. 24 most beneficial form of graded stress. I have no doubt that it applies to the mind and emotions as well as to the rest of the body. This principle has, I believe, particular application to the aging process. In my opinion this (physical and emotional) decline will proceed more slowly if the bodily functions are fully employed and, through moderate and unfortunately descending stress, they are held to their maximum capacities.

NEWSWEEK

CAN AGING BE CURED?

"Dr. Herbert A. DeVries of U.S.C. found that exercise increased oxygen-carrying capacity -- the best single measure of vigor - reduced body fat and nervous tension and improved heart and blood-vessel function as well as

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arm strength. DeVries' exercise program includes calisthentics, jogging and swimming. He insists that the elderly begin exercising with caution and that a physician should perscribe the appropriate regimen with the same care and certainty that he uses in choosing drugs for his patients."

Preparet by the Prindent & connection Projuced + these end posts The administration on Aging published by She administration on Reging, May 1968 THE FITNESS CHALLENGE ... IN LATER YEARS

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"Physically active individuals are less likely to experience a heart attack or other forms of cardiovascular disease that sedentary people. And apparently an active person P. A who does suffer a coronary attack will probably have

a less severe form and will be more apt to survive the experience.

"For meny individuals, frequent involvment in some sort of physical activity helps to reduce mental fatigue, tension, strain, or boredom produced by our highly

P.2 technical and sedentary way of life."

"Perhaps the greatest benefit of maintaining physical Q.2 fitness is the degree of independence it affords. This is a quality to be most prized in the later years."

"Exercise of the joints also helps slow down the onset or the development of arthritis, one of the most common and painful diseases assosciated with old age."

p.3

"Programs that promise "fitness" in a minute a day are more than inadequate in their effect on circulation. $\rho.4$ So, too, are the traditionally recommedded activities

for the elderly, such as puttering in the garden or taking a leisurely stroll.

THE WHITE HOUSE WASHINGTON March 12, 1975

MEMORANDUM TO:

ANDRE BUCKLES

FROM:

PAM NEEDHAM

SUBJECT:

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Orthodox Jews' Urban Problems

Following is my suggested response to Item 6 on the paper presented by the Orthodox Jews.

#6 -- Aid to the Elderly Poor

The Administration shares the group's concerns about the effects of categorical projects that serve to benefit some areas but do not reach others. That is why we have supported the elimination of categorical grants wherever possible, and have not supported additional community action programs.

For the aging specifically, we strongly support the Area Agencies on Aging established by the 1973 Amendments to the Older Americans Act. Through establishing some 600 agencies covering all areas of the United States, we would provide nationwide coverage of comprehensive coordinated services for the elderly. The major task of these agencies is to serve as a focal point for the aging in its area. They determine the need for social services for older people with an emphasis on low-income requirements, develop programs for addressing those needs, establish funding arrangements, and coordinate the provision of services. We feel these area agencies are the appropriate and most effective means of providing services to the elderly and are much preferable to special projects.



THE WHITE HOUSE

WASHINGTON

March 5, 1975

MEMORANDUM FOR

JAMES MITCHELL MIKE DUVAL PAM NEEDHAM DICK PARSONS ROGER SEMERAD

ANDRE BUCKLES

FROM

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Attached is a memorandum describing the concerns of American Orthodox Jews regarding urban problems encountered by the Orthodox Jewish Community. The memorandum was presented to the White House Staff by Rabbi Leib Pinter who hopes to discuss these matters in the near future with the President.

I would most appreciate your reviewing the attached memorandum and preparing a statement of the Administration's position on the matters discussed in the memorandum which fall in your area of responsibility.

Your suggested response is requested by Noon Monday, March 10.

Thank you for your assistance in this regard.

this is a different memo from the one we sent to HEW on "poverty quilelines"

From:

To:

Re: URBAN PROBLEMS FACING THE AMERICAN ORTHODOX JEWISH COMMUNITY OF AMERICA

- 1. The American Orthodox Jew lives a double life. Like everyone else in this great country of ours, he has his obligations and responsibilities as an American citizen, which, in turn, entitles him to the services and benefits enjoyed by all American citizens. In addition, however, he also bears the obligations and responsibilities of his faith, as outlined in the Scriptures (Torah) and elucidated by Rabbinic scholars over the past 3000 years. By the very nature of his most demanding religion (613 Biblical commandments alone, not counting thousands of Rabbinic ordinances. decrees and customs), his life is constricted by the requirements of Judaism. His work days and hours cannot conflict with certain holy days; his food must be kosher (prepared in strict accordance to certain laws); his place of residence is limited to areas where he can enjoy the services of and be able to maintain economically a synagogue, a Jewish school, Jewish stores carrying Jewish foods, etc., etc. In fact and in practice, the vast majority of Orthodox Jews live in large population centers, in the megalopolitan urban areas of this country, where the above conditions can most easily be met. Consequently, while he does enjoy the necessities his Jewishness requires, he is forced, perhaps more than any other American minority group, to suffer the ills that plague our urban centers. In Particular:
- 2. <u>Mass transit</u>. Orthodox Jews, as residents of large metropolitan areas, are vitally interested in low cost mass transit. Even those who possess cars prefer not to drive them into the clogged, smogged city centers where they usually work. Any Federal policy which ignores the crying need for

aid to urban mass transit deeply, and adversely, affects this portion of our population.

- 3. <u>Housing</u>. As members, in large measure, of the lower middle-income group, Orthodox Jews suffer - along with others in the same financial position from the rigid eligibility standards for Federally-subsidized housing. Standards which have been established on a national level tend to be unfair and discriminatory to those who live in higher-priced urban areas, effectively denying them the opportunity to share in the benefits of middle-income (\$12 - \$18,000) housing programs.
- 4. <u>Race relations.</u> Forced as they are by their religious needs to reside and conduct their businesses in the inner cores of large cities, Orthodox Jews are often the first to bear the brunt of changing neighborhoods. The historically "wandering Jew" becomes a wandering Jew again in <u>free</u> America! - as less desirable and often vandalizing minorities encroach upon Jewish neighborhoods. Legitimate Jewish businessmen, who cannot move their stores every few years, often feel the wrath of the underprivileged who shoplift, rob, and loot and even set fire to the closest "representatives" of the existing economic structure of this country. In addition to Federal policies to ameliorate the economic plight of the underprivileged, we recommend special programs of protection and compensation for the victimes of this unsettling and destructive <u>national</u> problem.
- 5. <u>Affirmative action</u>. While the Orthodox Jew is as liberal as the next man, we feel that the recent approach to racial inequities called "affirmative action" (or more realistically "reverse quotas") is highly unfair. Should one group of people who have a culture inclination toward scholastic pursuits or sociological ambition toward certain professions now be

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MEMORANDUM #1

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<u>penalized</u> because some other minority group exhibited no such inclination or ambition? An analogy might be in order: Jews and Italians emigrated to this country in large numbers at about the same time. Jews tended to enter certain businesses and professions, Italians certain others. Must we today redress the balance and insist that Italians be entitled to a specific percentage of openings or jobs in medicine or law, for example? In this land of equal opportunity, every citizen should be free to follow his <u>natural</u> inclinations with regard to choice of occupations, particularly when to do otherwise would <u>deprive</u> other citizens of <u>their</u> opportunities to pursue their legitimate desires. "Quotas" and "equal opportunity" are contradictory terms; "merit" should be the keystone of our national policy.

6. Aid to the elderly poor. For the vast majority of Americans, old age represents poverty; retiring millionaires are relatively scarce, pension plans are still not as widespread or as effective as they should be, Social Security payments hover around the poverty level. The Federal governments antipoverty programs, while highly commendable, are also occasionally inequitable. These programs select geographic target areas (in New York, for example, these would be Harlem, East New York, Brownsville, Bedford Stuyvesant, etc.) and funnel their funds through community corporations or organizational groups. If a poor person (and this applies particularly to Orthodox Jews) does not live in such a target area, or does not belong to such an organizational group, there is little chance that he would benefit from such programs. We would suggest that Federal antipoverty projects be awarded to city-wide or area-wide blanket organizations the intended needy wherever they might be.