Health Aspects of Aging

Purdue University Cooperative Extension Service
Definitions:

Because the practice of geriatrics is so recent it is thought advisable to define some of the terms which are as yet comparatively new, but which, it is hoped, will soon become familiar both to the professions and to the general public.

Geriatrics—that department of medicine which treats of the clinical problems of senescence and senility; geriatric medicine is clinical medicine throughout maturity and aging.

Gerontology—the science which deals with old age and its phenomena.

Gerontology—the scientific study of the aging process, its phenomena, diseases, etc.

Gerontologist—a specialist in diseases of old age.

It may be well also to define more clearly some terms which are often used indiscriminately and about which there is considerable misconception as to their meaning and application.

Aging—a normal, biologic process which begins at conception, continues with varying acceleration throughout life and ends only at death.

Aged—those who at any period of life (usually in advanced years) show the result of aging.

Senescence—process or condition of growing old; normal old age.

Senility—feebleness of body and mind incident to old age; abnormal old age.
Health Aspects of Aging

The average sixty-year-old man of today is far more vigorous than his father was at the same age. He may be as physically and mentally fit as his ancestor was at forty. He is enjoying life and looking forward to much more of it with zest and confidence. Indications are that greater improvement will be made. This will be due largely to the rapid advance of medical science. Great strides have been made in research, in diagnosis, health counseling, and health service.

However, a man of sixty may present the common picture of an eighty-year-old man, if he leaves everything to luck and nature, getting medical guidance only when he is sick. Such a man may be a collection of hidden, half-developed illnesses and wholly neglected opportunities for making his life long and happy.

There are many factors that affect the aging and aged person, but none is more important than his health! His ability to enjoy life, work, do for himself in fact, anything that he may wish to do, is affected by how he feels. Of course, this is true at all age levels, but aging accentuates the problem.

Health—Stumbling Block

Interested groups over the state, meeting to discuss what should and can be done by communities to help the aging and aged citizens enjoy life and be more productive to the community, repeatedly stress that health is one of the big problems that must be solved. They recognize that from the age of 45 on there is a clear rising prevalence of long-term illness and a decline in energy reserve. Beyond age 70, a rapidly rising number of people suffer from one or more handicapping conditions.

Although aging begins at birth, the process is speeded-up from age 45 and on. It also seems that the health practices followed during this period of life (middle years) will have a definite bearing on the individual's health during later years.
The task of laying the foundation for health in later years is well expressed by Clark Tibbits, Chairman, Committee on Aging, U. S. Department of Health, Education and Welfare. He says that "Achievement of optimum health in the middle years and its prolongation into old age will depend much upon individualized assessments of the total person in the middle years coupled with education and, of course, with new knowledge, sound preventive measures, and restorative therapy."

So planning and preparing for good health in later years begins at an early age—actually at birth. By the middle years practices conducive to good health must be in force if better health is to be achieved during later years.

To help you to understand the factors involved in preparing for health in later years, the following points should be considered:

1. What is age?

2. What are the normal physical and mental changes during the aging process?

3. What can be done to prepare for health in later years?

Let's take a look at the facts that will help to answer these questions:

1. What is Age—Age and aging are normal life processes. Aging begins with birth and continues until death. A person's body is made up of tissues, organs, and cells. Through the years these parts experience changes resulting in aging. A person ages as a whole and also in part. All parts of the body do not age the same. For example, the liver or heart may show the effects of time much more than other parts of the body.

   Aging affects the total person—not just one part. The body, mind and spirit all show wear through the years.

2. Aging in Body Structures—Aging occurs in the body cells, tissues, and organs, and in the whole man as well. For example, it is a sign of age in the whole man when the shoulders droop and the body sags in response to the continual downward drag of gravity. This posture at any age is a result of weakness and a cause of more weakness to come. Bad posture in children makes for mediocre health and invites a rundown condition in middle-aged life. Much more can be done in childhood in preparation for old age than in later years.

   Every kind of cell except those of the brain is born, matures, ages, and dies, and is replaced by others. Red blood cells lead a hurried life and die quickly, lasting only 80 to
120 days. Ten million are born and ten million die every second. White blood cells last longer, muscle and bone cells longer still. So to keep our cells young and healthy is the basic problem of geriatrics.

How Aging is Shown—Aging is shown in body cells in several ways. Many people shrink with age. Others will put on bulk with the years. Those who shrink usually live longer. And here is the reason. Instead of shrinking, some cells may collect and store up dull, inert material like calcium, the little brown granules in the cells of the heart, and especially fat. This kind of aging causes more trouble than gradual shrinking.

Aging is well on its way when fatty substances collect in the cells and in the arteries—particularly in their inside lining. This condition is one form of hardening of the arteries. These fatty substances interfere with circulation and the nourishment of the whole body. When the organs call for more blood, the blood pressure rises and the heart must pump harder. By this means the body fights against aging. But the harder it fights, the more tired it gets.

Finally, something breaks down—apoplexy or a heart attack ruin an already weakened body. This is the common picture of the illness of age: how it silently begins and silently progresses. It is the story behind the terrific increase in diseases of the heart and circulatory system.

Many Signs of Aging

There are many indications of aging. All body organs, tissues, and cells are affected. For example, the eyes lose elasticity year by year—thus they age. The skin's elasticity diminishes with age, it sags, dries and wrinkles. The heart is affected by many things, but the most common heart damage is caused when the blood supply is choked off by a coronary spasm or blockage—in turn caused by aging processes elsewhere in the body. The stomach, liver, thyroid, in fact, all parts of the body are affected by the aging process.

If we are to prepare for healthy, happy, and productive later years we must delay the aging process and minimize the damage done to the body through normal aging and disuse. This preparation for health in the sixties, seventies, etc., must begin in the fifties, forties, thirties and earlier.

Mental Health in Later Years—
As mentioned above, the brain cells may wither and perish before the
rest of the body, but they are never replaced. The human brain is good for a great number of years, provided it is properly trained and cared for. This fact is evidenced by the great number of men well along in years who regularly hold positions of great responsibility in government, industry, etc.

As a person ages there is increasing stresses and strains placed on the mind. These forces reach a climax in later years and an adjustment in living is needed for a happy and productive life.

Retirement, though eagerly awaited, often brings a feeling of not belonging, of not being needed, of being finished. Children—are reared and gone—requiring much less parent responsibility. Adjusting to a lowered income requires much adjustment. A decline in physical vigor and vitality will have a bearing on the emotional well-being of the individual.

All these factors are conducive to feelings of loneliness and frustration. They may, unless checked, result in not only mental but also physical deterioration.

3. Preparation for Health in Later Years—Is aging inevitable? Can it be prevented? Probably not; but there are many things that we can do to slow it down. The total body must be considered—organs—tissues, and cells, because a weakening of any one part will contribute to the deterioration of the whole.

It is true that a certain amount of deterioration accompanies aging, but if understood and properly prepared for, the later years of life can be happy and productive ones.

There are certain things that can be done to prepare for health. Let's take a look at some of the main practices that will make these later years good ones:

Periodic Health Check Wise

A. Geriatric Examination:

The basis of preparing for and keeping as good health as possible in old age is the periodic health
examination with continuous medical direction and supervision of the patient. This physical health examination should be much more than mere determination of the presence or absence of disease. It should mean the measurement of health in all that health implies. It should be, in fact, a health consultation between the individual and his physician, a diagnostic study on the part of the physician of evidences of decrease in positive health rather than just a search for disease.

Several steps are involved in an anti-aging examination. They will probably require more than one visit to the physician’s office. Generally speaking, the following steps are involved:

1. The individual decides that a health consultation with his physician is necessary and makes an appointment.

2. Data Gathering—The physician will obtain information concerning ancestry, history of illnesses, etc., and other facts pertaining to health, such as rest habits, diet, etc. A search for clues to aging will be made. Laboratory tests such as urine and blood and x-ray tests will be arranged.

3. The physician will analyze the results of the examination, laboratory tests, and history.

4. When the data is all collected and analyzed, the physician will advise you as to what has happened and what will be necessary to repair and prevent damages. He will offer health counseling concerning diets, rest, recreation, etc.

This examination will uncover existing illnesses; in addition it will reveal any signs and conditions of age and plans to correct, remove, or ease them. Through it diet, necessary medication, and daily habits can be planned to make for a more healthful life in later years.

B. Diet:

Important at all ages, diet is of greater importance to the aging or aged individual. Research shows that many people sixty years of age and older do not eat a balanced diet. An adequate amount of protein is often absent from their diet in addition to many of the essential vitamins. They often do not get enough minerals such as calcium and iron.

Because they may have to eat alone, they will eat just what is on hand and rather skimpily. Frequently decreasing funds is the reason for an inadequate diet.

For good health at any age and particularly in later years, a well-
balanced diet is needed. Senior citizens should make an effort to include plenty of lean protein (eggs, meat and cheese) in their diet. Weight control is very important. Many of the chronic diseases are more prevalent among the overweight.

C. Rest and Recreation:

Rest and recreation must be adjusted to the individual and to the years of life. The aging and aged person will need more frequent rest periods. Recreation is very important. But again adjustment is needed. The sixty year old person cannot continue to do some of the things or maintain the pace that a 35-40 year old person can.

D. Mental Health:

To combat the feeling of loneliness and frustration that may develop, advance planning for this retirement from the fast pace of earlier years is needed. Hobbies, new friends, social clubs, part-time employment, etc., will help in this transition.

Aging—Natural Process

It should be stressed again that aging is a natural process and should not be confused with dis-
ease. It means a continuous change in body structure and functions. We are forced to adapt and adjust to these changes.

Certainly there are many advantages of youth, but there are also advantages of maturity and age. The increased leisure time provides an opportunity for self-expression and pursuit of knowledge.

Understanding, preparation and adjustment to aging will provide the basis for a happy and productive life for the aging and aged person.

At a recent conference on aging, Dr. Bortz, Philadelphia, presented ten basic health steps for senior citizens. These ten points are as follows:

1. Balanced diet. The aging and aged individual needs a good supply of lean protein.

2. Elimination of waste products (bowels, skin, lungs).

3. Adequate rest for mind and body.

4. Recreation.

5. Sense of humor.

6. Avoidance of anger, hate, jealousy.

7. Companionship — very necessary to combat feeling of loneliness and frustration.

8. Sense of pride in job — and having some task to do.

9. Participation in community.

10. Keeping an open mind.

The individual must accept much of the responsibility in carrying out these ten steps. In fact, most of the responsibility of preparing for aging must be accepted by the individual; however, there are many things that can best be accomplished through community action.

The community should plan for providing adequate facilities and care for the aged and also for providing opportunities for the aging and aged to enjoy life. Housing, nursing homes, medical facilities, employment, recreation facilities, etc., are among the services that the community should plan and work toward.
Acknowledgement

1. Much of the information in this pamphlet was quoted or adapted from “Live Long And Like It,” Public Affairs Pamphlet No. 139, C. Ward Crampton, Public Affairs Committee Incorporated, 22 East 38th Street, New York 16, N. Y. Permission was obtained from the committee.


4. The Human Machine at Mid-Life, Wilma Donahue, University of Michigan, Ann Arbor, Michigan.
Cooperative Extension Work in Agriculture and Home Economics, State of Indiana, Purdue University, and U. S. Department of Agriculture Cooperating. L. E. Hoffman, Director, Lafayette, Ind. Issued in furtherance of the acts of May 8 and June 30, 1914.