# Diet Care and Services for Patients With Cardiovscaular Disease

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AS INVESTIGATORS seek the causative and preventive factors in heart disease, the public is demanding information on how to apply findings in heart research to patterns of daily living. Articles, books, and radio and television programs have supplied information, and health agencies have held open meetings, particularly on the subject of obesity and cardiovascular disease, in an effort to meet this demand. Recently the American Heart Association and the National Heart Institute presented a summary entitled "A Decade of Progress Against Cardiovascular Disease" (1).

Although diet as therapy seems to be increasing in importance, especially in the prevention and control of atherosclerosis, it is only one interrelated factor in the medical care regimen.

#### **Status of Diet Therapy**

Briefly, current diet therapy in cardiovascular disease emphasizes (a) calorie restriction to achieve and maintain correct weight, (b)sodium restriction to control the edema which often accompanies congestive heart failure and to lower blood pressure in some cases of hypertension, and (c) selection and restriction of fats as a possible factor in the treatment and prevention of atherosclerosis.

Obesity, or even relatively mild overweight,

Miss Heap is chief nutrition consultant, Heart Disease Control Branch, Division of Special Health Services, Public Health Service. The article is based on a paper given at the Annual Health Conference of the Pennsylvania Department of Health, held at University Park, August 18, 1959. is considered a hazard to patients with heart disease, and weight reduction is generally the physician's first order for overweight cardiac patients. Physicians vary in their methods for treating obesity, but they agree as to its danger to health, especially in heart disease. Generally, they also agree that patients should continue on an adequate diet, and when specific modifications are necessary, they should be made only on the physician's recommendations.

Sodium restriction is the established diet therapy in the treatment and control of the edema accompanying congestive heart failure. Physicians prescribe diets of designated levels of sodium according to the individual patient's needs. In some cases of hypertension, sodium restriction helps to lower blood pressure.

Sodium-restricted diets are also prescribed for the prevention of edema when treatment includes the use of such medications as adrenal steroids which have sodium-retentive properties and cause excessive fluid accumulation in the tissues.

At present there is no established dietary treatment for atherosclerosis. Current studies indicate several important facts that relate dietary fat to the level of blood cholesterol. Increasing evidence points to the importance of the ratio of saturated to polyunsaturated fats in the diet in altering serum cholesterol. Metabolism studies indicate that polyunsaturated fats in the diet usually reduce the serum cholesterol and increase the cholesterol and cholic acid in the feces. Serum cholesterol concentration is a good indication of the total lipid concentration, but its true relation to coronary artery disease is still undetermined. However, diet is only one of the factors in atherosclerosis. Some others being studied singly and in combinations are sex, age, race, physical exercise, heredity, and stress. Until we learn more, it is impossible to pinpoint the one determining factor—dietary, physical, or environmental.

The current, widespread practice is to prescribe a modified diet on the theory that it will be beneficial to the patient with a certain heart disease.

Diet therapy in heart disease, except for a few treatments of established value, is constantly changing, partly because of new findings. It is important to establish the possible benefits of each discovery to patients with cardiovascular disease.

Because of the need for information and diet guides on fat selective and fat restrictive therapy, the American Heart Association and the American Medical Association are preparing such material for the use of physicians. Its purpose is to explain the current situation and what can be expected of this type of diet therapy with the knowledge that these prescribed diets will do no harm and that they may do some good.

However, the patient's adherence to the diet regimen is the final test. Diet therapy, for the most part, is a do-it-yourself project. It is the patient himself, or the person caring for him, who must understand and follow through on a diet.

One of the biggest blocks to a successful dietary regimen is the patient's lack of sufficient instructions when the diet is prescribed. If the patient is to derive the expected benefits, he must know what changes are required and how to make them accurately for each meal as long as he is on the prescribed diet.

When the physician prescribes a diet modification, it is his responsibility to initiate the patient's diet education and, as necessary, refer him to a diet counselor (nurse, dietitian, or nutritionist) for supplementary assistance. Few physicians can take the time to do more than explain the principles of the diet and give the patient standard diet references. But rarely can adequate instructions be given or learned in one quick lesson.

# **Counseling Services**

The majority of patients on prescribed diets lack the adequate counseling services which they should have. I exclude patients who are referred periodically during treatment by their physicians to dietitians or nurses for dietary guidance, patients attending clinics where dietary counseling is an integrated patient-care service, and hospitalized and institutionalized patients. I am concerned about the patients who, for the most part, have had only one instruction session, generally at the time the diet was prescribed. These patients are living at home and working.

Regardless of age or education, the average person does not have sufficient knowledge to fulfill accurately the requirements of most diet prescriptions. He is deluged by new and strange duties and rules. Perhaps he must learn the names and meanings of such unfamiliar nutrients as fatty acids, sodium, polyunsaturated fats, and cholesterol, and how to measure them in units, exchanges, grams, or milligrams. He needs explanations and guidance as each new need arises. When these services are provided adequately, he can follow a diet correctly.

However, even with close guidance by physician and diet counselor, it is not always easy for the patient to master the many details of his diet. To persist in meticulous daily application of his new dietary regulations demands both interest and ability.

Patients are often told to "cut down," "cut out," or "go easy" on salt, starches, or fats. Many persons disregard such advice and continue on their way, unworried. Others are convinced, however, that the prescription is essential to their health. They seek any source of help. They spend time and money and often become confused and unduly worried because the physician said, "Watch your calories."

This picture is not exaggerated. Every day numerous inquiries about prescribed diets find their way to pharmacists, government agencies, librarians, Congressmen, and even to charlatans and special food stores. Requests for help range from questions about sodium restriction to the meaning of hydrogenated and unsaturated fat. These requests make it clear that patients are interested in learning what their diets mean and how to carry them out.

Printed as well as oral instructions should always be a part of any prescribed diet. Standard diet references are a tool designed to help the patient help himself. Three sodium-restricted diet booklets (2) are the most recent patient education references. However, any diet pamphlet is standard only while on the shelf. Little attention or space can be devoted in standard guides to individual problems such as limited education, inadequate income, or lack of interest. And it is in solving these difficulties that individual counseling is of the greatest benefit.

A patient is justified in expecting adequate dietary instructions, just as he expects the services of a pharmacist for his drugs, of a nurse for his injections, and of a physical therapist for his exercises. Yet today only a small percentage of patients have the opportunity to obtain dietary counseling. The question is how can more of these services be developed.

There are several ways, but few of them have been explored, and few have been successful. Perhaps the most practical would be a cooperative community service designed to serve all patients on their physicians' referral. Such a service would assure physicians that their patients would receive sound dietary instruction supported by recommended diet guides or manuals. The patient would be better prepared to shoulder his diet therapy responsibilities, and the community would be one step higher on the ladder of improved health services.

Although there is a dearth of counseling services, recognition is growing that adequate diet education is essential for more effective diet therapy and for the development of sound nutrition practices in the general population.

Among the many diet pamphlets particularly helpful to persons who are not on prescribed diets are three basic guides. "Food for Fitness: A Daily Food Guide" is designed for all ages (3). "The Food You Eat and Heart Disease" summarizes current knowledge about diet and cardiovascular disease (4). "Food Guide for Older Folks" includes pointers on planning, buying, and preparation of food and recommendations for adjustment of calories as energy and maintenance needs decrease (5).

# **Future Activities**

For the future, I visualize nutrition education activities which will encompass the presumably healthy adult population as well as those under medical treatment. On the premise that the earlier one starts to achieve and maintain maximum nutritional health, the better the results, the development of two new nutrition education activities seems advisable.

The first is a sound nutrition course for all high school students. Its primary aim would be to teach students the relation of adequate diet to good nutritional health. Most young people, particularly boys, leave high school and soon accept family responsibilities with the scantiest understanding of this fundamental subject.

Second, I envision a community dietary counseling service available to anyone who requests nutrition information. This same service would also be available on referral by a physician to any patient on a prescribed diet. Such a service would be one more means of helping to prevent as well as to correct nutritional disorders.

A community dietary counseling service will achieve effectiveness only when it is initiated, directed, and used consistently by members of local medical societies in cooperation with other community health groups.

#### REFERENCES

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