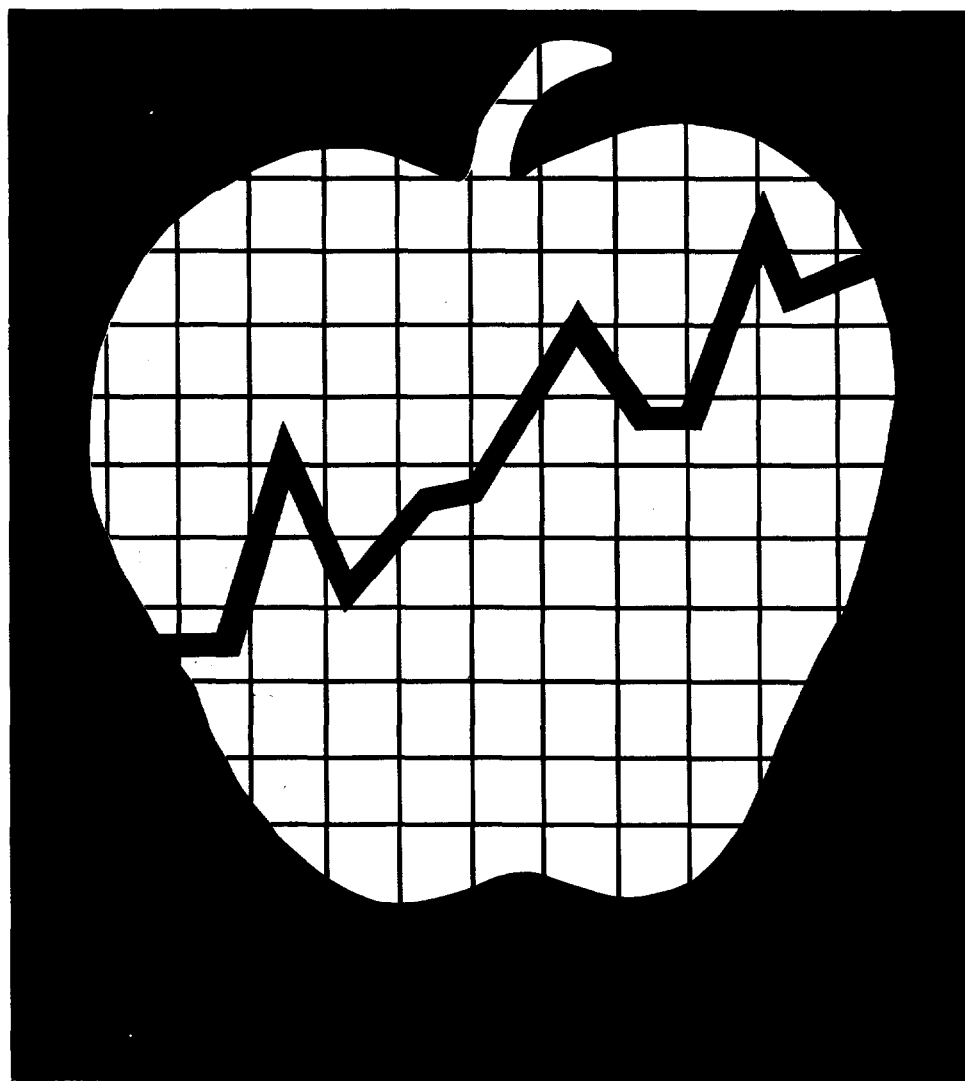


# The Surgeon General's Report on

## NUTRITION AND HEALTH



The Surgeon General's  
Report on  
NUTRITION  
AND HEALTH

Summary and Recommendations

1988

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The Surgeon General of the  
Public Health Service  
Washington DC 20201

**MESSAGE FROM THE SURGEON GENERAL**

I am pleased to transmit to the Secretary of the Department of Health and Human Services this first Surgeon General's Report on Nutrition and Health. It was prepared under the auspices of the Department's Nutrition Policy Board, and its main conclusion is that overconsumption of certain dietary components is now a major concern for Americans. While many food factors are involved, chief among them is the disproportionate consumption of foods high in fats, often at the expense of foods high in complex carbohydrates and fiber--such as vegetables, fruits, and whole grain products--that may be more conducive to health.

I offer this Report in the context of the obligation of the Surgeon General to inform the American public of developments in the science base that have widespread implications for human health. Perhaps the classic example of such reports is the one issued in 1964 during the tenure of one of my predecessors, Dr. Luther Terry, which summarized the epidemiologic evidence available at the time on the relationship of tobacco to health. This report called attention to the inescapable conclusion that cigarettes were a major source of illness and death for those who smoked--at that time a majority of adult men.

This Surgeon General's Report on Nutrition and Health follows the tradition of the original report on smoking and health. It addresses an area of some controversy and substantial misunderstanding. And the relative magnitude of the associated health concerns is comparable, with dietary factors playing a prominent role in five of the ten leading causes of death for Americans. In addition, the depth of the science base underlying its findings is even more impressive than that for tobacco and health in 1964, with animal and clinical evidence adding to the epidemiologic studies.

On the other hand there are some fundamental differences. Most obvious is the fact that food is necessary for good health. Foods contain nutrients essential for normal metabolic function, and when problems arise, they result from imbalance in nutrient intake or from harmful interaction with other factors. Moreover, we know today much more about individual variation in response to nutrients than we know about possible variations in


response to tobacco. Some people are clearly more susceptible than others to problems from diets that are, for example, higher in fat or salt.

Also, unlike the experience for tobacco in 1964, people are already making dietary changes, as witnessed by the shift to products lower in saturated fats. Nonetheless, the important effects of the dietary factors underlying problems like coronary heart disease, high blood pressure, stroke, some types of cancer, diabetes, obesity--problems that represent the leading health threats for Americans--indicate the potential for substantial gains to be accrued by the recommendations contained in this Report

It is important to emphasize that the focus of this Report is primarily on the relationship of diet to the occurrence of chronic diseases. The Report is not intended to address the problems of hunger or undernutrition that may occur in the United States among certain subgroups of the population. All Americans should have access to an appropriate diet, but they do not. And even though the size and numbers of problems related to inadequate access to food are proportionately much smaller than those related to dietary excesses and imbalances, the problems of access to food are of considerable concern to me, personally, wherever they may occur.

The apparently sizable numbers of people resorting to the use of soup kitchens and related food facilities, as well as the possible role of poor diet as a contributor to the higher infant mortality rates associated with inadequate income, suggest the need for better monitoring of the nature and extent of the problem and for sustained efforts to correct the underlying causes of diminished health due to inadequate or inappropriate diets.

This report was prepared primarily for nutritional policy makers, although the eventual beneficiaries of better nutritional policy will be the American people. I am convinced that with a concerted effort on the part of policy makers throughout the Nation, and eventually by the public, our daily diets can bring a substantial measure of better health to all Americans. I commend to them the recommendations of this Report.



C. Everett Koop, M.D., Sc.D.  
Surgeon General  
U.S. Public Health Service

## Foreword

This first *Surgeon General's Report on Nutrition and Health* marks a key event in the history of public health in the United States. While the Report has been developed for use by policymakers, it offers lessons that can be directly applied to the public. It responds to the increasing interest of scientists, health professionals, and the American people in the role of diet in health promotion. Within recent years, concerns about nutrition and health have expanded beyond the need to prevent deficiencies to encompass the effects of typical American dietary patterns on the incidence of chronic diseases that are leading causes of death and disability in this country. Although scientific research has provided substantial insight into the ways specific dietary factors influence specific diseases, there are still many uncertainties about diet-disease relationships. The Department of Health and Human Services, through the Public Health Service and the Surgeon General, welcomes the responsibility to evaluate the current state of knowledge and to advise the public accordingly.

This Report reviews the scientific evidence that relates dietary excesses and imbalances to chronic diseases. On the basis of the evidence, it recommends dietary changes that can improve the health prospects of many Americans. Of highest priority among these changes is to reduce intake of foods high in fats and to increase intake of foods high in complex carbohydrates and fiber.

The evidence presented here indicates the convergence of similar dietary recommendations that apply to prevention of multiple chronic diseases. The recommendation to reduce dietary fat, for example, aims to reduce the risk for coronary heart disease, diabetes, obesity, and some types of cancer. This advice is not new. But it is now substantiated by a large body of evidence derived from many different kinds of research—a research base that is now even more comprehensive than was the case for the pioneering 1964 *Surgeon General's Report on Smoking and Health*.

The weight of this evidence and the magnitude of the problems at hand indicate that it is now time to take action. In the cause of good health for all our citizens, I urge support for this Report's recommendations by every sector of American society.

Otis R. Bowen, M.D.  
Secretary

## Preface

The Public Health Service of the Department of Health and Human Services has long maintained an interest in the relationship between food and health. In the 1970's, this interest began to focus on the ways in which dietary excesses and imbalances increase the risk for chronic diseases. With the publication in 1979 of *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, attention turned toward environmental and behavioral changes that Americans might make to reduce their risks for morbidity and mortality. Nutrition was one such priority area. The 1980 report *Promoting Health/Preventing Disease: Objectives for the Nation* included 17 specific, quantifiable objectives in nutrition designed to reduce risks and to prevent illness and death. Also in 1980, the Department published, jointly with the U.S. Department of Agriculture, the first edition of *Dietary Guidelines for Americans*. This report, revised in 1985, includes seven recommendations that, taken together, address the relationship between diet and chronic diseases.

Diseases such as coronary heart disease, stroke, cancer, and diabetes remain leading causes of death and disability in the United States. Substantial scientific research over the past few decades indicates that diet can play an important role in prevention of such conditions. The Public Health Service has now reviewed this research and has produced a comprehensive analysis of the relationship between dietary factors and chronic disease risk. This *Surgeon General's Report on Nutrition and Health* summarizes research on the role of diet in health promotion and disease prevention. Its findings indicate the great importance of diet to health. They demonstrate that changes in present dietary practices of Americans could produce substantial gains in the health of the population. The Public Health Service is committed to improving the health of Americans through its programs in education, services, and research.

One mechanism for improving the health of Americans is through the 1990 Health Objectives for the Nation. The role of nutrition in health will continue to be a focus of national health priorities as we develop new objectives for the year 2000. Federal, State, and local governments, the American public, the food industry, and scientists and health professionals can work together to encourage Americans to make healthy food choices and to achieve national health goals.

I am pleased to commend to the American people this review of the scientific evidence that links diet to chronic disease, and I urge that the findings of this important Report be given your careful consideration.

Robert E. Windom, M.D.  
Assistant Secretary for Health

# Contents

Foreword .....	v
Preface .....	vii
Nutrition Policy Board .....	x
Acknowledgments .....	xi
Summary and Recommendations .....	1
Appendix A: Selected Events in the History of Nutritional Science to 1950 .....	21
Appendix B: Selected Federal Domestic Nutrition Policy Milestones, 1862–1988 .....	25
Appendix C: Federal Dietary Recommendations for the General Public, 1917–88 .....	29
Appendix D: Implications for Public Health Policy .....	33

## Full Report Contents

- |                                |                                  |
|--------------------------------|----------------------------------|
| 1. Introduction and Background | 11. Infections and Immunity      |
| 2. Coronary Heart Disease      | 12. Anemia                       |
| 3. High Blood Pressure         | 13. Neurologic Disorders         |
| 4. Cancer                      | 14. Behavior                     |
| 5. Diabetes                    | 15. Maternal and Child Nutrition |
| 6. Obesity                     | 16. Aging                        |
| 7. Skeletal Diseases           | 17. Alcohol                      |
| 8. Dental Diseases             | 18. Drug-Nutrient Interactions   |
| 9. Kidney Diseases             | 19. Dietary Fads and Frauds      |
| 10. Gastrointestinal Diseases  |                                  |



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