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APPLIED NUTRITION FOR PRACTICING DENTISTS

By ALFRED J. ASGIS, M.A., D.D.S., Ph.D., F.A.P.H.*
New York 17, N. Y.

Dentistry and the dental profession are again given their deserved recognition for their contributions to our national welfare and the advancement of science. This time dentistry is honored as a contributor to the science of nutrition.¹ It is a well-known fact throughout the world that the dentists, Wells and Morton, by their discovery of anesthesia, have been responsible for the revolution in surgery thus ameliorating the suffering of ailing mankind.² Dentistry next made its mark in the field of focal infection, to which dentists have contributed their share in correlating medicine and dentistry.³ In this field, the names of dentists are too numerous to mention here.⁴

Now, we are happy to note that N. Philip Norman, M.D., one of our pioneer nutritionists in America and a noted physician, who long ago recognized the relationship of oral health to general health, calls the attention of the American public to dentistry's outstanding contribution to the science of nutrition. In his recent popular work *Tomorrow's Food*, based upon principles outlined in his *Constructive Meal Planning*,⁵ Dr. Norman pays tribute to dentistry as a contributor to modern nutritional knowledge. The substance of his philosophy of good health is thus described on the front of the jacket of *Constructive Meal Planning*.

"Proper nutrition goes back to the seed and the soil, plus WHAT IS DONE TO FOOD before it reaches the shelves of your local food distributor, and what you DO TO IT before it is served on your table. This is the basic theme of this treatise on APPLIED NUTRITION—NUTRITION IN ACTION."

Food, as viewed by the author, is an essential element in the building of a sound economy and culture. The approach to nutrition is significant from the professional as well as from the technologic, economic and social standpoints.

FOOD, HEALTH AND MEDICINE

Dr. Norman's thesis may be stated in very simple terms in some such manner as formulated in the opening sentence of Dr. Belding's paper, "Healthy, Wealthy and Wise?"

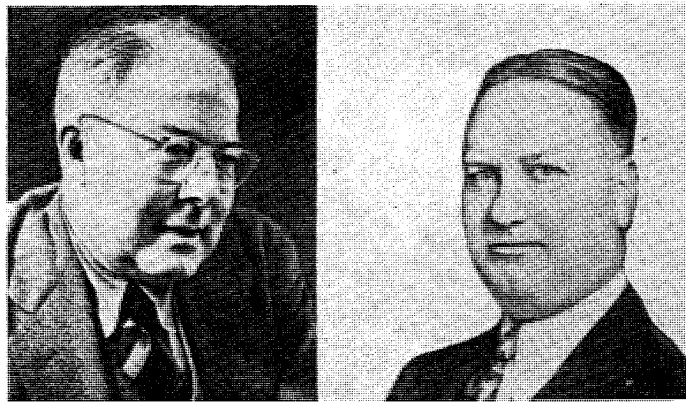
"Healthy, wealthy and wise; any one of these conditions or a combination of them is far more a matter of luck than determination. . . ."

"As cases in point, the histories of two large families of German extraction with whom I have been acquainted for years, are cited and though

*Assistant Professor of Oral Surgery; Lecturer on Public Health; Former Associate Professor of Philosophy of Dentistry; New York University College of Dentistry.

it may be said that they are of the same ethnic stock, there the resemblance ceases. . . .

"The X children were without exception the healthiest and most perfectly built young people in the entire township. When old John was criticized for the extravagant eating habits of the family, he would answer: 'I spend my money for foods; fools spend their money for doctor bills.'"⁶



James Rorty (left) and Dr. N. Philip Norman, co-authors of "*Tomorrow's Food*," published by Prentice-Hall. Mr. Rorty is a frequent contributor to national magazines, while Dr. Norman is presently Consultant Nutritionist for the New York City Departments of Health and Hospitals.

CONSTRUCTIVE MEAL PLANNING

In this handbook Dr. Norman gives a brief description of the essential food elements necessary to approach scientific meal planning. One should be familiar with basic facts which cover proteins, carbohydrates, hydrocarbons (fats) and accessory food factors. These are discussed in broad general terms.

Following this introduction are specific instructions for preparing each meal. Here breakfast (fruit and milk meal), lunch (starch meal) and dinner (protein meal) are outlined as to food content. Illustrative menus for breakfast, lunch and dinner are ample and explicit.

The last two chapters are devoted to general instructions and the practical aspects of applied nutrition. Here the author emphasizes the need for a comprehensive perspective in respect to the selection of foods of good quality and in balanced proportions.

The practical aspects of Dr. Norman's handbook on nutrition will be of interest to dentists and physicians, irrespective of whether or not they are general practitioners or specialists.

TOMORROW'S FOOD

For the first time we have available a serious technical book on nutrition written in popular style and in which are interwoven professional, social, economic, agricultural, processing and marketing problems. This is a novel way of treating the nutrition problem. Dr. Norman, the nutritionist, and Mr. Rorty, the popularizer, have performed a singular task in condensing and incorporating in one comprehensive volume the many related aspects of the complex problem of food. What makes this work so valuable is the fact that the layman's respect is heightened for science and scientific workers. What makes it more effective in arousing public interest is because it is written in a straight-from-the-shoulder style.⁷

It is impossible to cover critically the whole field surveyed in *Tomorrow's Food*. I will touch only upon a few items of general interest.

DENTIST'S HOLIDAY

This is the title of one of twenty-seven chapters in the book which deals exclusively with the problem of dental health and dental diseases in relation to food. The discussion centers chiefly around the work of Dr. Weston A. Price, and there are some good reasons for that. That reason may be found in the "new approach" to this public health problem initiated by Dr. Price.

Only a short while ago Dr. Belding called the attention of the dental profession to this new approach to the problem of modern biologic degeneration. He came across a report by Dr. Terrazas, a Mexican dentist, who found that Mexican Indians remained free of tooth decay and were extremely healthy as long as they adhered to their native environment. Referring to Dr. Price's work, Dr. Belding remarked that

"instead of the customary procedure of studying people who were suffering from disease, he had the good sense to study people who were largely free from these afflictions. Some primitive people are not afflicted with many of the common diseases of civilization."⁸

We need not here review the findings of Dr. Price, so ably reviewed in *Tomorrow's Food* and reported in his work.⁹ They are well-known to dentists everywhere. More of his work and recent findings will be found in the publications of the American Academy of Applied Nutrition, which is doing a fine pioneering job in translating nutritional theory for use in practice. The concluding paragraph in this chapter is significant and deserves repetition:

"It is important to note that the best primitive diets are high in all the protective factors, proteins, minerals, fat-soluble vitamins and water-soluble vitamins. They are not only far higher in nutritive content than the white man's diets that displaced them, but markedly higher than the minima set up as a goal for America to shoot at by the Food and Nutrition Board of the National Research Council."¹⁰

DENTAL CARIES

Dr. Norman points out that it has not yet been proved that excessive sugar consumption is *always* the causative factor in dental caries.¹¹ But for nearly a century "physicians, dentists and nutritionists" have regarded the world's increasing sugar consumption with outspoken apprehension. We overlook the fact that we are dealing with "refined sugar" when we speak of sugar in general terms. The health problem is, therefore, related more directly to the "processing" or "refining" of sugar than to sugar consumption. As a consequence of this processing sugar is deprived of its vitamins and minerals. Hence the problem.

FOOD AND TUBERCULOSIS

The Honorable Governor Thomas E. Dewey of the State of New York appropriated twelve million dollars of the taxpayers' money to make it possible for him to demonstrate that his health program will cut down this disease among the population in the next ten to twenty years. The objective of the program is most admirable, humane and worthwhile. It consists chiefly of the free x-ray examination of the chests of people and the availability of medical care to the afflicted.

Asks Dr. Norman:

"Can we call this a genuine *preventive* program? Is not the emphasis on treatment which frustrates the preventive program of tuberculosis?"

It is a well-known fact that in European countries, where the nutritional status was on a low level as a result of wartime conditions and a restricted food supply, there has resulted a significant increase in the incidence of tuberculosis. Is it too much to say, queries Dr. Norman, that the increase in tuberculosis is *not caused chiefly by a decrease in caloric food consumption?* Is it not the result of *food quality inadequacy?* How can we doubt the importance of *food quality in the prevention of tuberculosis?* This applies not only to tuberculosis but also to all degenerative types of diseases which exact a toll far greater than do those affected by tuberculosis.

NUTRITION IN ORAL MEDICINE AND ORAL SURGERY

The dentist of today is called upon to diagnose and treat nonsurgical as well as surgical conditions of the mouth. These two areas of scientific and clinical endeavor in the dental field are identified as *oral medicine* and *oral*

surgery respectively.¹² Oral diagnosis implies the recognition of systemic disorders by their oral manifestations in addition to other factors.¹³ The dentist often notices signs of systemic disease and nutritional disturbances before the physician does.¹⁴ It is for this reason that attention was called repeatedly in the dental press to the need for instruction of dentists in nutrition.^{15, 16, 17}

Nutritional dental research has confined its studies mainly to dental caries, which explains why Norman devotes much space to this dental subject.^{18, 19} Oral clinicians have, however, not neglected to utilize nutritional knowledge in oral medicine and in oral surgery²⁰ especially in healing²¹ and in the treatment of fractures of the jaws.²² Professor Anthony Mecca, in teaching inhalation anesthesia, emphasizes the observance of dietary status as a prerequisite to the proper administration in ambulatory practice.²³ Nutrition has wide applications in dentistry as in medicine.²⁴ It should add much to our knowledge of oral physiology, the cornerstone of the science of oral health.^{25, 26}

FOOD AND HEALTH TREATMENT

Dr. Norman significantly remarks that the medical professions—medicine and dentistry—do not have genuine, clear-cut *health* programs. They only talk about *sickness* insurance plans. They are not health plans at all whether they are based upon the Wagner-Murray-Dingell proposals, or the Taft Charity Health Bill.²⁷ The exception is of course the “Seven Point People’s Health Security Plan” proposed by the Health Council, which insists upon sound nutrition, healthful housing, effective industrial hygiene and comprehensive health care.²⁸ The professions and the Labor leaders think they are dealing with the health issue²⁹ by endorsing the insurance principle.³⁰ But what is the content of these programs? Most plans are concerned more with illness and pathologic processes than with health and prevention. Until they stress the nutritional aspects they will not have a genuine health program.

FOOD AND COMPREHENSIVE REFORM

In *Tomorrow’s Food*, stress is laid on *the tools of liberation*. This means complete reorganization agriculturally, technologically, and biologically of our total food culture and economy. This is fully outlined in the section “*Tools For Liberation*.” The suggestions are worth serious consideration. Good food, in the opinion of Dr. Norman, is more important to the welfare of the G. I.’s than is the indirect distribution to them of free automobiles which means enjoyment in a “Fool’s Paradise.”

Professor Hooton, of Harvard University, has called attention to the dentist’s responsibility in the realm of dietary care in the promotion of oral health. It is also their responsibility to see that the teaching of nutrition

becomes a part of the dental curriculum³¹ and made part of the equipment of the dentist and the public health dentist.³² Mayor William O'Dwyer, of the city of New York, made it part of his health program to provide funds for Nutritional Research. Health Departments are moving ahead in this direction and include nutrition in their programs.³³ This is reform in action.^{34, 35}

BIOGRAPHY OF DR. N. PHILIP NORMAN

Dr. Norman comes from the "deep South" and is a graduate from Vanderbilt University School of Medicine. He was a Major in World War I and has since been practicing medicine in New York City. He was formerly a lecturer on Gastroenterology at the New York Polyclinic Hospital and Medical School. He is now consultant Nutritionist to the Departments of Health and Hospitals of the City of New York. He has written extensively in his field of specialization and contributed to nutrition and research.³⁶

I am personally gratified to have been in part responsible for Dr. Norman's deep interest in dentistry as a health service and speciality of medicine,³⁷ thus inscribing in the pages of the history of nutrition the name of one of dentistry's immortals, Dr. Weston A. Price.

Dr. Norman assisted me in the founding of the American Stomatological Association and was one of its first Vice-Presidents who,³⁸ in collaboration with Professor Oliver T. Osborne, Dr. Homer E. Smith, Dr. George Reese Satterlee, Dr. Anthony Bassler³⁹ and many other outstanding physicians, has at all times held high the name of dentistry in medical esteem.⁴⁰ At no time did he forget to call public attention to dentistry's services to mankind. I am especially delighted with having been instrumental in bringing together Dr. Norman and Mr. Rorty, whose collaboration has resulted in this widely-read and well-received book *Tomorrow's Food*.⁴¹

The problem of food and nutrition in relation to health and disease is a complex one. The last word has not been said and further research is needed to implement the knowledge we already have.⁴² In this age of propaganda and all kinds of nostrums in humane disguise, balance and perspective are essential. With respect to food and nutrition a restrained attitude towards panaceas should prove especially helpful.⁴³

This book is recommended as a valuable source of information for dentists, physicians, nutritionists, dieticians, food processors, teachers, labor leaders and social legislators. The perspective advanced in this work is constructive and optimistic. It will help them formulate correct nutritional programs to lead us on the road to solving our health problems.

7 East 42nd Street

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