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ABSTRACT

Nutrition is well-recognized as a necessary component of educational programs for physicians. This is to be valued in that of all factors affecting health in the United States, none is more important than nutrition. This can be argued from various perspectives, including health promotion, disease prevention, and therapeutic management. In all cases, serious consideration of nutrition related issues in the practice is seen to be one means to achieve cost-effective medical care. These modules were developed to provide more practical knowledge for health care providers, and in particular primary care physicians. The modules were written by dietitians and nutritionists working closely with physicians. The modules were field tested and reviewed by basic and clinical science faculty in a number and variety of educational programs. The introduction to each module explains the importance of the particular topic, and the learning goals and objectives clarify what can be achieved through the study of the material. Self-checks are presented and in all cases, achievement with regard to goals can be evaluated. On the average, 45 minutes are required to complete each module. Each module includes references for the physician and for the physician to give to the patient. Also included are a number of supporting appendices. This document is the faculty guide and comprehensive index to all 26 volumes. A description of the complete series and suggestions for their use are included. (CW)

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## The Nutrition in Primary Care Series Contains These Modules:

1. Nutrient Content of Foods, Nutritional Supplements, and Food Fallacies
2. Appraisal of Nutritional Status
3. Nutrient and Drug Interactions
4. Normal Diet: Age of Dependency
5. Normal Diet: Age of Parental Control
6. Normal Diet: Adolescence
7. Normal Diet: Pregnancy and Lactation
8. Normal Diet: Geriatrics
9. Dietary Management in Obesity
10. Dietary Management in Diabetes Mellitus
11. Dietary Management in Hypertension
12. Dietary Management in Hyperlipidemia
13. Dietary Management in Gastrointestinal Diseases
14. Dietary Management for Alcoholic Patients
15. Nutritional Care of Deteriorating Patients
16. An Office Strategy for Nutrition-Related Patient Education and Compliance

## The Nutrition in Health Promotion Series Contains These Modules:

17. Individual and Social Factors
18. Metabolic Principles
19. Risk Factors and Disease Prevention
20. Decoding Fad Diets
21. Protecting Bone and Teeth
22. Exercise and Physical Activity
23. Vitamins and Trace Minerals
24. Behavioral and Neurological Disorders
25. Preventing Hospital and Home Malnutrition
26. Questions About Common Ailments

Faculty Guide (includes comprehensive index for  
Modules 1-26)

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# Comprehensive Guide and Topical Index

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## Nutrition, Medicine, and Medical Education

It is difficult to pick up a newspaper or a popular magazine and not find at least one article that is related to nutrition. Frequently, radio and television news programs include reports on potential relationships between foods and degenerative diseases such as cancer, stroke, hypertension, and tooth decay.

Most recently reports have shifted in emphasis to include topics related to health promotion and disease prevention. Related to this phenomenon is a burgeoning number of lay persons, health professionals, and businesses which seek financial gain from changing societal values. Such gain comes from a variety of sources including books, specialty foods, and health foods.

Surprisingly, medical training has not treated nutrition with the same degree of currency. Many health care providers, including primary care physicians, complete their training with little study of practical, everyday aspects of nutrition and food, including interrelationships with health and disease. When faced with questions and challenging decisions about diet, the professional becomes aware of the educational gap to be filled in his or her background.

Nutrition is now well-recognized as a necessary component of educational programs for physicians. This is to be valued in that of all factors affecting health in this country, none is more important than nutrition. This can be and has been argued from various perspec-

tives, including health promotion, disease prevention, and therapeutic management. In all cases, serious consideration of nutrition-related issues in the practice of medicine is seen to be one means to achieve cost-effective medical care.

Primary care physicians are in an ideal position to promote optimal nutrition for their patients. Since these physicians often follow patients and their families for many years, they are able to assess tendencies for diseases or disorders such as obesity, hypertension, diabetes mellitus, and heart disease. Not only should therapeutic management of these types of medical problems include nutrition, but the problems often can be prevented by patients following sound advice regarding nutrition offered by their physicians.

Because the physician is viewed by patients to be an expert on nutrition, the physician should be well educated in this field. Physicians in the past have resisted learning nutrition because it was often taught in an apologetic and condoning manner. Content was not related to clinical practice, and physicians were not encouraged to consider themselves as preventers of disease by recognizing patients at potential nutrition or health risk. Nor were physicians taught that proper nutrition throughout a lifetime could be of assistance in maximizing chances of maintaining a disease-limited lifespan. It is believed that these trends can be mediated through study of carefully prepared self-study materials.

## The Nutrition in Primary Care Series and the Nutrition in Health Promotion Series

Working with the premise that health care providers, and in particular primary care physicians, need more practical knowledge, the Department of Family Medicine of The Ohio State University has developed and produced 26 self-study modules which individually and collectively address three major themes. By major theme and individual module title, these are:

### Normal Diet

1. Nutrient Content of Foods, Nutritional Supplements, and Food Fallacies
2. Appraisal of Nutritional Status
3. Nutrient and Drug Interactions
4. Normal Diet: Age of Dependency
5. Normal Diet: Age of Parental Control
6. Normal Diet: Adolescence
7. Normal Diet: Pregnancy and Lactation
8. Normal Diet: Geriatrics

### Nutrition and Therapeutic Management

9. Dietary Management in Obesity
10. Dietary Management in Diabetes Mellitus
11. Dietary Management in Hypertension
12. Dietary Management in Hyperlipidemia
13. Dietary Management in Gastrointestinal Diseases
14. Dietary Management in Alcoholic Patients
15. Nutritional Care of Deteriorating Patients
16. An Office Strategy for Nutrition-Related Patient Education and Compliance

### Disease Prevention and Health Promotion

17. Individual and Social Factors
18. Metabolic Principles
19. Risk Factors and Disease Prevention
20. Decoding Fad Diets
21. Protecting Bone and Teeth
22. Exercise and Physical Activity
23. Vitamins and Trace Minerals
24. Behavioral and Neurological Factors
25. Preventing Hospital and Home Malnutrition
26. Questions About Common Ailments

## Development of Each Series

The work began with the formation of an Advisory Committee representing physicians, residency directors, residents, and dietitians. The Advisory Committee helped to establish criteria to guide the development of each Series. These criteria included:

1. Topics should relate to the most common reasons for visits to physicians' offices.
2. Topics should include preventive and therapeutic nutritional considerations essential in health.
3. Topics should be directly amenable to applied nutrition concerns.
4. Recognized and accepted major preventive medicine issues must be addressed.
5. Primary prevention must be discernible from secondary prevention.
6. Secondary prevention issues are acceptable as long as they can be used as prospective strategies.
7. The concept of risk factors must be considered as much a major theme as are the themes of health promotion and health maintenance.
8. The topics must be developed such that the dietary information can make significant changes in the lives and potential health problems of patients.
9. The topics should be developed such that the scientific basis is apparent.
10. Each topic should have a strong patient educational thrust.
11. Topics should not replicate but should complement existing educational materials regarding nutrition in primary care.
12. Topics should include applicability to a variety of socioeconomic, environmental, psychological, behavioral, and geographic conditions.
13. Within the broad range of topics, there must be significant attention given to minority groups.
14. Topics must be amenable to individual study, as well as for use in conference settings.
15. Topical content must facilitate physicians using the modules as a reference for answering patients' questions.

The modules were written by dietitians and nutritionists working closely with physicians. Once developed, they were field tested and reviewed by basic and clinical science faculty in a number and variety of educational programs. This process allowed for needed refinements in order to keep the materials to a reasonable length and to assure their relevance to medical practice.

## Potential Use of the Modules

The *Nutrition in Primary Care Series* and the *Nutrition in Health Promotion Series* have been found to be a cost- and time-effective means for physicians and physicians-in-training to study about nutrition and to apply the principles in practice. These two Series are effective for individual study, for classroom or conference use, and for teaching concurrent with patient care.

### Individual Study

The introduction to each module explains the importance of the particular topic, and the learning goal and objectives clarify what can be achieved through study of the material. The manner in which the content is presented varies from module to module, depending on the nature of the topic. Likewise, self-checks are presented by different means, but in all cases achievement with regard to goals can be evaluated.

On the average, 45 minutes are required to complete each module. However, in most modules, boldfaced highlights have been placed strategically throughout to

- shorten study time of a module,
- allow a module to be studied in blocks of time,
- serve as reference points to specific sections of the module, and
- aid in review.

### Teaching

The *Nutrition in Primary Care Series* and the *Nutrition in Health Promotion Series* can be used in the classroom as primary or supplementary readings. Since they have been developed with practicality in mind, they can complement a more detailed presentation of the pertinent biochemical and technical aspects of nutrition.

The boldfaced highlights can be helpful in preparing handouts, slides, and lecture notes. The tables and figures are useful for extracting pertinent information for the preparation of presentations to either professional or lay audiences.

### Practice

Most modules contain a number of tables and lists of guidelines; these are useful as "fingertip library" material. When the modules are available in the physician's office, such as in the consultation room, quick reference can be made to appropriate sections to answer questions raised by patients and to give sound nutritional advice.

Many of the appendices can be used as handouts to patients. Most modules contain a section entitled "Resources for the Patient." The entries are an excellent base for patient education. Many of the materials referenced in this section are free or are inexpensive and can be ordered in quantities.

## Extended Use of the Materials

Each module is designed to stand alone, however, for the most complete understanding of the application of nutrition to medical practice, it is recommended that the 26 modules be reviewed and studied. For the person who is interested in additional information on particular topics, sections near the end of most modules contain "References" and "Resources for the Physician" which list materials that provide more lengthy discussions of the topics and provide greater depth for one's understanding.

### Comprehensive Index

*To aid study and practical use of the 26 modules, the following comprehensive index should prove helpful. Please note that:*

1. *The italicized numbers in parentheses refer to the module number.*
2. *Page numbers are indicated after the parenthesized module numbers.*
3. *"f" following a page number refers to a figure; "t" refers to a table.*
4. *Module numbers which follow major headings indicate that the module is a rich information source for that topic.*



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## Some Abbreviations Used in the Nutrition in Primary Care Series

ATP	adenosine triphosphate
c	cup
cc	cubic centimeter
CNS	central nervous system
FDA	Food and Drug Administration
gm	gram
IBW	ideal body weight
IU	International Units
kcal	kilocalorie
kg	kilogram
lb	pound
lg	large
MCV	mean corpuscular volume
MDR	minimum daily requirement
med	medium
$\mu$ g	microgram
mEq	milliequivalent
mg	milligram
MJ	megajoule
ml	milliliter
oz	ounce
RDA	Recommended Dietary Allowances
RE	retinol equivalents
sl	slice
sm	small
Tbsp	Tablespoon
TPN	total parenteral nutrition
tsp	teaspoon
USDA	United States Department of Agriculture