

Utah State University

DigitalCommons@USU

---

All Graduate Theses and Dissertations

Graduate Studies

---

5-1983

## Using Videodisc Technology and the Index of Nutritional Quality to Teach Dietary Guidance to Young Adults

Glenda Wigginton Edmunds  
*Utah State University*

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>



Part of the [Food Science Commons](#), and the [Nutrition Commons](#)

---

### Recommended Citation

Edmunds, Glenda Wigginton, "Using Videodisc Technology and the Index of Nutritional Quality to Teach Dietary Guidance to Young Adults" (1983). *All Graduate Theses and Dissertations*. 5275.

<https://digitalcommons.usu.edu/etd/5275>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact [digitalcommons@usu.edu](mailto:digitalcommons@usu.edu).



USING VIDEODISC TECHNOLOGY AND THE INDEX OF  
NUTRITIONAL QUALITY TO TEACH DIETARY  
GUIDANCE TO YOUNG ADULTS

by

Glenda Wigginton Edmunds, R.D.

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF SCIENCE

in

Nutrition and Food Sciences

UTAH STATE UNIVERSITY •  
Logan, Utah  
1983



## ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to my graduate committee for their assistance and support throughout the development and evaluation of the nutrition education program. Special thanks go to Dr. Bonita W. Wyse for her expertise and advise throughout my course of study. Dr. Michael DeBloois also deserves a special thank you for providing countless hours of expert assistance during various phases of the project.

I am thankful for the financial support provided by the Allied Health Advanced Traineeship from January 1, 1981 to September 14, 1981, grant number 5 A02 AH 00746-05.

Many thanks go to Kathy Daugherty for her help and for the excellent typing services rendered.

I thank my parents, Joseph and Billie Wigginton, for their encouragement and support in my pursuit of higher education.

To my husband, Richard, I express my love and gratitude for being a continual source of support during the writing and defense of this thesis.

Most important, I give sincere thanks to my Father in Heaven for the inspiration and motivation needed to complete this thesis.

Glenda Wigginton Edmunds

## TABLE OF CONTENTS

|   | Page |
|---|------|
| ACKNOWLEDGEMENTS . . . . .  | ii   |
| LIST OF TABLES . . . . .  | v    |
| ABSTRACT . . . . .  | vi   |
| STATEMENT OF THESIS PROBLEM. . . . .                                | 1    |
| Introduction. . . . .   | 1    |
| Nature and Origin of the Study. . . . .                             | 2    |
| Statement of the Problem. . . . .                                   | 3    |
| Purpose of the Study. . . . .                                       | 3    |
| Objectives. . . . .   | 4    |
| Research Design . . . . .   | 5    |
| Hypothesis. . . . .   | 6    |
| Limitations of the Study. . . . .                                   | 6    |
| Definition of Terms . . . . .                                       | 6    |
| REVIEW OF LITERATURE . . . . .                                      | 8    |
| The Need for Nutrition Education and<br>Dietary Guidance. . . . .   | 8    |
| Index of Nutritional Quality. . . . .                               | 13   |
| The Need for Use of Innovative<br>Instructional Technology. . . . . | 19   |
| Videodisc Technology. . . . .                                       | 21   |
| METHODOLOGY. . . . .  | 26   |
| Restatement of Objectives . . . . .                                 | 26   |
| Research Design . . . . .   | 26   |
| Description of the Program and Its<br>Development . . . . .         | 27   |
| Description of the Subjects . . . . .                               | 34   |
| Description of Instrumentation. . . . .                             | 35   |
| Data Processing and Analysis. . . . .                               | 36   |
| RESULTS. . . . .  | 37   |
| Restatement of the Problem. . . . .                                 | 37   |
| Results . . . . .   | 37   |
| Feedback Responses. . . . .   | 40   |

## TABLE OF CONTENTS (continued)

|   | Page |
|---|------|
| DISCUSSION . . . . .  | 44   |
| Major Findings. . . . .   | 44   |
| Discussion. . . . .   | 44   |
| Summary and Conclusions . . . . .   | 46   |
| Recommendations . . . . .   | 47   |
| LITERATURE CITED . . . . .  | 49   |
| APPENDICES . . . . .  | 52   |
| Appendix A. Terminal Performance Objectives. . . . .                                  | 53   |
| Appendix B. General Program Outline. . . . .  | 55   |
| Appendix C. Videodisc/Microcomputer<br>Planning Sheets. . . . .                       | 57   |
| Appendix D. Foods Used for Determination of<br>Food Group Nutrient Profiles . . . . . | 144  |
| Appendix E. Pre and Posttest and Feedback<br>Survey . . . . .                         | 147  |

## LIST OF TABLES

| Table   | Page |
|---|------|
| 1. Participant's scores on pretest and posttest and responses to the feedback survey. . . . . | 38   |
| 2. Summary of responses to the feedback survey . . . . .                                      | 42   |

## ABSTRACT

Using Videodisc Technology and the Index of  
Nutritional Quality to Teach Dietary  
Guidance to Young Adults

by

Glenda Wigginton Edmunds, Master of Science  
Utah State University, 1983

Major Professor: Bonita W. Wyse, Ph.D., R.D.  
Department: Nutrition and Food Sciences

A review of the literature indicated a need for nutrition education materials to be current with prevailing scientific knowledge, using advanced instructional technology. Individuals need help in applying nutrition principles to their dietary practices.

A nutrition education program utilizing the nutrient density concept and the dietary guidelines for use on videodisc with microcomputer interface was developed and evaluated. The evaluation of the program did not prove to be effective statistically but learners did show an interest in the program and had positive feedback in regard to the information presented and the technology used.

(162 pages)

## STATEMENT OF THESIS PROBLEM

### Introduction

Nutrition is a rapidly growing, continually changing science. It is a subject which has gained popular interest with the American population. In an overview of the current status of nutrition, Mason and Guthrie (1979) indicated that nutritionists and physicians have an excellent opportunity to motivate individuals toward appropriate dietary intake stating:

....the current level of interest in nutrition and health makes educational efforts timely and enhances their chances of success to improve dietary habits and health. The upsurge of interest in health and nutrition on the part of the public is evidenced by the concern about physical fitness, the sales of diet books and by enrollments in weight reduction clubs. We clearly have a "teachable moment" and hence a unique opportunity to motivate millions... (p. 4).

While Americans seem very much interested in the science of nutrition, the amount of reliable, up-to-date nutrition information being disseminated appears limited. White (1976) states that Americans' knowledge of nutrition does not measure up to the current, advanced information available in this science. The need for current, updated nutrition education materials exists.

According to McNutt (1981), this decade is one in which nutritionists have an excellent opportunity to provide individuals with current nutrition information. She asserts that nutritionists not only have a solid background and expertise in the science of nutrition, but that they now have many new tools and resources



available to help them convey nutrition information. She says that the challenge for nutritionists in the 1980's will be to tap these new tools and resources. This includes making use of individuals with an expertise in media.

### Nature and Origin of the Study

In the past, most nutrition education materials directed at the American public have focused on nutritional adequacy of the diet. Food guides were developed by government agencies to assist individuals in planning and evaluating their diet. Over the years, changes were made in these food guides to make them easy to understand and to work with. In 1956 the U.S. Department of Agriculture revised an existing food guide to include four food groups; the milk and milk products group, the fruits and vegetables group, the meat, poultry, fish and eggs group, and the bread and cereal group. Each food group contains foods with a similar nutrient make-up. When prescribed servings from each group are eaten, an individual has a simple means of assuring dietary selections which provide the necessary nutrients.

Private food marketing groups have made many film strips and films based on the Basic Four Food Groups concept. Much of what is found in school libraries in the way of nutrition education media has been produced by these groups. While these materials have been useful in educating individuals in regard to nutritional adequacy of the diet, in general they have not included the current scientific knowledge concerning the association between diet and certain

diseases. This is probably due to the fact that most of these materials are many years old.

Films and film strips have been widely used for instructional purposes. The use of films and film strips is similar to traditional classroom instruction in that the student learns passively. There is no interaction between the student and the media source. New instructional strategies are geared toward individualized and self-paced instruction (Wittich and Schuller, 1979). These means of instruction promote interaction between the student and the instructor. New instructional technology is available to incorporate current nutrition information into an instructional package which makes use of current instructional strategies.

#### Statement of the Problem

Americans' knowledge of nutrition and their ability to make prudent dietary decisions is limited by the current information which is available. Existing nutrition education materials do not focus on current nutrition concepts and have not utilized "state of the art" instructional technology. The need for current, updated nutrition education materials, utilizing contemporary instructional technology exists.

#### Purpose of the Study

The purpose of this study was to develop, implement and evaluate an innovative nutrition education program for a pilot study at Utah State University (USU). The subject matter was designed to provide



current nutrition information and to assist individuals in making informed food choices. An additional component of this study was to utilize new instructional technology to assist and promote learning.

### Objectives

#### Objective I

To develop a nutrition education program based on the Index of Nutritional Quality, the Daily Food Guide and the Dietary Guidelines for Americans.

- A. Develop performance objectives.
- B. Develop pre- and post- criterion referenced test and feedback survey.
- C. Write script and storyboards for an interactive program on videodisc and microcomputer.
- D. Have portions of script filmed, have slides produced and artwork completed.
- E. After above components completed, edit and compose final product.
- F. Have faculty members evaluate pre- and post-test for validity and evaluate the feedback survey.
- G. Make appropriate revisions.
- H. Have computer programmer integrate videodisc and microcomputer program complete with pre and post test.

#### Objective II

To implement the nutrition education program in a pilot study at USU using student volunteers.

A. Coordinate testing of program with computer programmer to have him available for any necessary assistance with hardware.

B. Provide complete instruction and assistance for volunteers participating in the pilot testing of the program.

### Objective III

To evaluate the effectiveness of the nutrition education program by means of a single group pre- and post-test and to obtain feelings about the program by students using a feedback survey.

A. Analyze data obtained from the testing using a correlated t test to determine statistical significance.

B. Analyze data obtained from the feedback survey to determine participants' feelings about the program.

### Research Design

The research design was that used in educational research and development. After a review of the literature, terminal behavioral objectives were written and the instructional materials were developed.

While there was a basic outline for program continuity, changes were made in conjunction with recommendations by the post-production staff and the computer programmer based on a formative evaluation of how the program would actually work upon its implementation.

Implementation of the package was accomplished by pilot testing at Utah State University.

Results of the pilot testing are summarized in the Results section of this thesis. Recommendations for future use of the program are in the Discussion section of this thesis.

### Hypothesis

The videodisc program "Planning For a Better Diet" will provide instruction of Dietary Guidance and the Nutrient Density concept to students at USU. Those students completing the program will be better equipped to make prudent changes in their diets while being aware of the nutritional adequacy of their diet.

### Limitations of the Study

Ideally any testing of an educational program should include as many subjects as possible. The reason being that a larger sample size will generally be more representative of the total population.

Due to the program being approximately one hour in duration, only seventeen student volunteers were able to participate in the time that the equipment was available for testing purposes.

### Definition of Terms

CAI. Computer assisted instruction.

Daily Food Guide. The five basic food groups as developed by the U.S. Department of Agriculture.

Dietary Guidelines for Americans. Recommendations for modifying dietary intake as developed by U.S. Department of Agriculture and Department of Health and Human Services.

Index of Nutritional Quality. The ratio of the nutrient composition of food to nutrient requirements of the human (Hansen, 1973).

Interactive Instruction. Interaction between a person and some type of technology for instructional purposes.

Videodisc. A disc which produces both visual display and sound when played.

## REVIEW OF LITERATURE

The Need for Nutrition Education and Dietary Guidance

A survey conducted by the United States Department of Agriculture's Economics and Statistics Service (Jones and Weimer, 1981) found that people are concerned about the relationship between diet and health. The survey queried food frequency patterns and changes in the use of food by the respondent which occurred for nutrition or health reasons. Sixty-four percent of those households surveyed had made dietary changes in the three years prior to the survey because of nutrition and/or health reasons. Dietary changes were the result of concern about excess sugar, calorie intake or weight control, salt intake or blood pressure control, fat intake and cholesterol intake.

While households reported a decrease in consumption of foods which contribute significant amounts of sugar, fat, cholesterol, salt and calories, the report stated that frequency-of-use patterns of households concerned about sodium intake or blood pressure control did not differ significantly from other households in regards to intake of food items containing substantial amounts of this nutrient. Although the population seems to desire preventive health care from a nutritional standpoint, it appeared that individuals may have difficulty in altering dietary practices to meet their expressed goal.

Fifty-six percent of respondents in this survey mentioned health care professionals as the most influential source of information in their decision to make dietary changes. Nutrition messages in mass

media were cited by one-third of the respondents as a primary factor influencing their dietary changes. The authors of the report concluded that dissemination of reliable nutrition information was needed, and that priority should be given to quality nutrition information from both media sources and from health care professionals.

Concern by Americans for their dietary intake stems from research in the past ten to twenty years that increasingly associated diet with disease conditions such as obesity, hypertension and atherosclerosis (Bray, 1980). Nutrients which have been implicated in these disease conditions include fat, cholesterol, sugar and sodium. Nutrition education, however, traditionally has been directed toward helping individuals select foods which assure an adequate intake of essential nutrients.

The Basic Four Food Group concept has underpinned most of the nutrition education efforts during the past twenty years. This food guide was developed by the U.S. Department of Agriculture (USDA) so that consumers could have a simple method to aid them in adequate dietary selection. Minimum servings from each food group were reported to provide approximately 1,200 kilocalories and eighty percent or more of the RDAs for protein, vitamins A and C, thiamin, riboflavin, niacin, calcium and iron (Light and Cronin, 1981). While it was possible that individuals could select a nutritionally balanced diet using this food guide, it did not address the nutrients implicated in certain disease conditions which were of concern to consumers.



According to Wardlaw (1981), we are now in an era of public health characterized by a need for emphasis on individual health behavior in which preventive measures against cardiovascular disease, cancer, etc. are necessary. She has asserted that nutrition education programs should address these individual health problems. The 1979 Surgeon General's report, "Healthy People," stressed the importance of individual health behavior (U.S. DHEW/PHS, 1979). Diet was referred to as a possible risk factor in some individuals for cardiovascular disease. The association between sucrose consumption and development of dental caries was documented. Heavy alcohol consumption was deemed a "health-threatening behavior."

A chapter in the Surgeon General's report titled, "Preventive Services for the Well Population," discussed the Lifetime Health Monitoring Program, developed in part by Dr. Lester Breslow, Dean, School of Public Health, University of California, Los Angeles. This program divided the lifespan into ten categories and discussed health goals and screening procedures considered desirable for individuals in each category. Nutrition was listed as being an essential component of preventive health care in each of the ten categories. For school-age children (ages 6-11), adolescents (ages 12-17) and young adults (ages 18-24), it was stated that "goals are to establish healthful behavior with respect to nutrition, exercise, sexual development, alcohol, cigarette smoking, drug use, and family life. Patterns established in these years influence the development, many years later, of serious and prevalent diseases, including heart

disease and cancer, and thus make health education and counseling essential."

Early in 1980, the U.S. Department of Agriculture and Department of Health and Human Services jointly published nutritional guidelines, "Nutrition and Your Health: Dietary Guidelines for Americans" (USDA-DHHS, 1980). These guidelines are:

1. Eat a Variety of Foods
2. Maintain Ideal Weight
3. Avoid Too Much Fat, Saturated Fat, and Cholesterol
4. Eat Foods with Adequate Starch and Fiber
5. Avoid Too Much Sugar
6. Avoid Too Much Sodium
7. If You Drink Alcohol, Do So in Moderation

There has been much controversy as to the necessity for individuals to modify their diets to maintain or improve health. Opponents believe that there is not enough evidence to warrant major changes in the diet of the general public. Robert E. Olson, member of the Food and Nutrition Board (FNB) of the National Academy of Sciences in defense of the FNB's publication "Toward Healthful Diets" and in criticism of the USDA-DHHS guidelines for Americans (FNB, 1980a) stated, after citing several studies that showed inconclusive data:

It ... appears that the recommendations to modify diet with respect to fat, cholesterol, sugar, complex carbohydrates, and fiber in order to reduce chronic disease rates are made of articles of faith rather than of science.

This author, and many other health care professionals, believe that the public cannot afford to wait for "absolute" proof to warrant



dietary changes. Prior to the publication of the Dietary Guidelines, an expert panel of the American Society for Clinical Nutrition, comprised of nine scientists, evaluated the evidence relating diet and health. Bray (1980) reviewed these evaluations and developed five guidelines based upon them. These guidelines are very similar to the USDA-DHHS Dietary Guidelines for Americans, which came out four months later.

Recent dietary guidelines suggested by the committee on Diet, Nutrition and Cancer of the National Academy of Sciences (NAS) support the USDA-DHHS Dietary Guidelines (1982). The committee made six recommendations for modifying dietary practices which they felt would decrease the risk of cancer. Among these, of particular interest is the recommendation: "Reduce fat intake from the present average forty percent of total calories to thirty percent to reduce the risk of breast and colon cancer associated with high fat diets." This contradicts the NAS Food and Nutrition Board's statement in "Toward Healthful Diets" that healthy Americans need not modify fat and cholesterol consumption.

Two educational pieces have been issued by the U.S. Department of Agriculture which complement and reinforce the dietary guideline statement: "The Hassle-Free Guide to a Better Diet" (USDA, 1980) and "Ideas for Better Eating: Menus and Recipes to Make Use of the Dietary Guidelines" (USDA, 1981). The first pamphlet discusses the Basic Four Food Groups and introduces a fifth food group which includes fats, sweets and alcohol. This fifth food group does not have a recommended number of servings to obtain each day, rather, the

number of servings is dependent upon caloric need. Foods in this recently added food group can be considered "calorie-dense", meaning that they contribute toward an individual's energy needs but do not contribute significant amounts of any other nutrients. Foods in the former four food groups can be considered "nutrient-dense", referring to the significant nutrient contribution these foods make to an individual's dietary needs in relation to the calories that the food provides. The second booklet contains daily menu patterns for different calorie levels, and lists of food items are provided which are low or moderate in amounts of salt, fat, saturated fat, cholesterol and sugar.

#### Index of Nutritional Quality

In addition to the publications provided by USDA-DHHS to aid consumers in menu planning and food selection, the Index of Nutritional Quality could augment the nutrition message.

Hansen (1973) defined nutrient density of a food as the ratio of the nutrient composition of food to nutrient requirements of the human, using calories as the common denominator for comparison of these two values. Wittwer et al. (1977), have used the term "Index of Nutritional Quality" (INQ) to describe the above relationship. An INQ value can be determined for a food by using the following equation (Windham et al., 1981):

$$\text{INQ} = \frac{\text{Amount of Nutrient in a Food/1000 Kcals}}{\text{Allowance of Nutrient/1000 Kcals}}$$

INQ is a tool which enables us to qualitatively evaluate the nutritional characteristics of an individual food, a meal, or food

intake for an entire day. It can give individuals a more precise idea as to whether food selections are nutrient dense or calorie dense. This is particularly useful for individuals who consume a limited amount of kilocalories, e.g. individuals who decrease caloric consumption for weight reduction purposes (Hansen and Wyse, 1980a; Hansen and Wyse, 1980b; Wittwer et al., 1977).

The Recommended Dietary Allowances (RDAs) published by the National Research Council, National Academy of Sciences (1980) have long been used by nutritionists and dietitians in evaluating dietary intake of population groups for nutritional adequacy. The Committee on Dietary Allowances of the Food and Nutrition Board establishes allowances for each nutrient for which adequate data are available. These allowances are considered to be adequate to meet the known nutritional needs of healthy Americans (FNB, 1980b). Since nutritional requirements differ for individuals throughout the lifecycle, the RDAs are expressed according to age and sex categories. While the specific RDAs are useful, a general system of nutrient needs based on energy consumption would be more practical for the public as a whole. A statement by members of the Food and Nutrition Board (FNB) of the National Research Council, National Academy of Sciences in the Ninth Edition of Recommended Dietary Allowances (1980b) emphasizes that individuals consume food of similar nutritional quality:

In practice, consumers - whether children or adults, male or female - generally obtain their dietary allowances from a common table or restaurant menu, making choices according to individual preference and consuming sufficient quantities to satisfy their energy needs. In planning diets for such heterogeneous populations, it is usually impractical to provide different menus for different age and sex groups with different energy requirements. Planning one diet using

the recommended nutrient allowances per 1,000 kilocalories to compute safe nutrient densities for all ages would enable all to obtain an adequate supply of nutrients while consuming energy according to their needs. (p. 13)

Since individuals consume food of similar nutritional quality, nutrient allowances per 1,000 kilocalories is a viable means of assisting individuals in menu planning.

To obtain a single value allowance expressed in terms of energy, the RDA must be converted into an allowance per 1,000 kilocalories. This is accomplished by dividing the RDA for each age and sex classification by the average calorie allowance and multiplying by 1,000 (Hansen and Wyse, 1980b). According to Hansen and Wyse, the RDAs for many nutrients per 1,000 kilocalories are constant. They submit that this "(simplifies) the choice of a single value to be used as a standard for these nutrients." In deriving a standard for nutrients whose values are not constant, Hansen and Wyse recommend basing the standard on the needs of individuals whose energy requirements are lowest, thus assuring the adequacy of that nutrient even for these individuals.

Windham et al. (June, 1981), evaluated diets in the United States population using nutrients per 1,000 kilocalories. Data from the 1977-78 U.S. Department of Agriculture (USDA) Nationwide Food Consumption Survey (NFCs) were used. Data from the survey included: (1) food used in a week by approximately 15,000 households in 48 contiguous states and (2) actual food consumption by 34,000 individuals in the above households. The authors looked at the nutritional quality of food consumed by various age-sex groups.

Nutrient density profiles, represented by bar graphs, were derived for the dietary intake of each individual in the study. A comparison of the average nutrient density profiles of men and women indicated that nutrient intakes per 1,000 kilocalories were consistent, although females had diets of greater nutrient density in regards to vitamins A and C. Diets were also found to be consistent on a nutrient density basis for all individuals four years of age and older, again the exception being vitamins A and C. It was reported that the differences in the nutrient density of vitamins A and C in the diet were a result of food preferences as opposed to limitations in the food supply. This study indicated that, on the average, the nutritional quality of food consumed by Americans was the same, regardless of age or sex. The authors also found that intakes of calcium, iron, magnesium and vitamin B<sub>6</sub> in the diet were at substandard levels, indicating that a large portion of the population may be at risk for these nutrients.

A second report by Windham et al. (1983), looked at the impact of socioeconomic status on nutrient density of diets, again, using data collected from the USDA-NFCS. Socioeconomic data included: annual household income, employment, education of heads of households, race or ethnic origin, food shopping practices and participation in food assistance programs.

Race did prove to be a factor which affected the nutrient density of diets. It was reported that Blacks and Spanish individuals consumed a significantly lower amount of calcium per 1,000 kilocalories than any other race. Blacks on the average also consumed



diets with lower magnesium densities compared with other race or ethnic groups while hispanics on the average had the lowest vitamin A density of diets evaluated.

Household size also affected nutrient densities of diets. Individuals in households with four or fewer members had higher fat consumption than households with more than four members. The data also showed that vitamin C consumption was greater in households with fewer members.

While nutrient densities of diets were affected by some of the socioeconomic factors, the authors reported that overall, on the average, the socioeconomic factors reviewed had little significant difference on nutrient consumption per 1,000 kilocalories. In a summary statement by the authors the importance of these results are discussed:

The general uniformity of nutrient density consumption patterns of different socioeconomic groups has important implications for nutrition programs. The results reinforce the nutrient density concept as a useful and effective means of improving basic knowledge and understanding of nutrient consumption patterns. (p. 34)

The advantages of using the concept of nutrients per 1,000 kilocalories in an educational package are obvious; from the standpoint that it can be used by both sexes and all age groups, and individuals of different socioeconomic backgrounds. In terms of teaching dietary guidance, this system would be most beneficial as nutrients which need to be emphasized for a greater intake, e.g. iron, vitamin B<sub>6</sub> and other nutrients found to be at risk in some diets, and those nutrients which should be limited, e.g. sodium, fat, etc. can be addressed at a common level.

A nutrition education program based on the nutrient density concept has been used in grades K-6 (Brown et al., 1979). Brown developed materials using the Index of Nutritional Quality for both teacher and student use. The program was planned so that it could become part of an existing curriculum. Concepts and behavioral objectives of the nutrition education curriculum differed for various grade levels, becoming progressively more sophisticated for higher grade levels. One component of the fourth, fifth and sixth grade student's program utilized food profile cards which contain a graphic representation of the nutrient density of a food. Transparent overlays which are placed over the graphic nutrient profile display on the food profile cards were used so that students could perform what the authors call "nutrient addition." Using felt-tipped markers, students traced the graphic nutrient profile onto the overlay. After tracing the profile for one food, the overlay can be placed on a graphic nutrient profile for another food, for addition of its nutrient contributions. This system is useful in that students can see how foods compliment each other nutritionally and aid them in selection of foods which will contribute to daily nutritive needs. Brown reported that teachers involved with the program evaluated it as being very good. The program also proved effective in increasing the nutrition knowledge of the students and in improving their eating habits.

The nutrient density concept has also proven to be effective in increasing the nutrition knowledge of adolescents. German (1980) developed a nutrition education component for high school curriculums

and evaluated the effectiveness of the program. It was reported that there was a significant increase in post-test scores over pre-test scores in both schools that the program was taught.

The positive results of the above studies indicate that using the nutrient density concept in nutrition education programs is an appropriate and successful method of teaching nutrition.

#### The Need for Use of Innovative Instructional Technology

While nutrition education programs based on the nutrient density concept have proved to be effective in increasing a learner's nutrition knowledge, according to a United States Health Education Survey, nutrition was the topic most frequently discussed in health education classes but it was the least successful subject taught (Kirk, 1975, as cited in Wardlaw, 1981). This lack of success in nutrition education as a whole has been attributed to several factors, including the lack of appropriate instructional materials (Maretzki, 1979). Maretzki points out that curriculum research, design, testing, dissemination and evaluation are needed to produce an innovative nutrition education program.

McNutt (1981) addresses the changes which have occurred in nutrition that have had a significant impact upon nutrition education. Scientific advances, personal life-style variations and societal efforts to improve nutritional status are areas which were examined. According to McNutt, nutrition education materials should contain newer information which should reach individuals of all ages, occupations and both sexes. She also discusses the need for nutrition



educators to make use of media specialists. McNutt contends that few nutritionists have the ability and skill to write for the public or act as spokespersons on television or radio. She suggests that efforts be made "at linking the scientific knowledge of nutritionists with the creativity of advertisers and the communication skills of writers in order to bring useful nutrition information to people... ." (p. 2). The challenge for nutritionists, she asserts, is to be willing to delegate part of the role of nutrition educator to media experts and other educators while remaining as a subject matter specialist.

A study by Christopher et al. (1980) compared instructional approaches of teaching introductory college nutrition. Students were randomly assigned to a traditional lecture-discussion instruction or to a multimedia presentation which included the use of videotapes and supporting written materials. The separate classes were taught by the same faculty member. The results of this study showed that knowledge gain of students exposed to the multimedia format was as good or better than that of students taught by the traditional method. It was felt by the authors that students had a better attitude towards televised instruction.

Spitzer (1980) contends that young people have been conditioned to be passive learners. He believes that students should become involved in the learning process by decision making and problem solving as opposed to passively receiving information disseminated by teachers. Educational technology, he asserts, can be used to benefit the student by providing better opportunities for response-based

learning. He suggests that computer-based instruction is a viable approach to response-based learning. To encourage active participation in learning, simulation and gaming are recommended as means by which students can make decisions and solve problems while experiencing true-to-life situations. Benefits of simulation include: (p. 34-35)

1. simulations provide an important link between classroom and life experience, allowing students the opportunity for experimentation in a relatively safe environment before making decisions with real-life consequences.
2. simulations shift responsibility for learning from teachers to the student.

In the sixth edition of "Instructional Technology: Its Nature and Use," one of the six learning tenets is that learning requires involvement (Wittich and Schuller, 1979). The authors state that new instructional media make it feasible for one student to discover information on his own at his own rate. Being able to interact facilitates involvement and hence, they contend, facilitates learning.

DeBloois (1982) also suggests that students who are actively involved in the process of learning will learn more at a faster rate and that these individuals will retain the information longer than those who learn passively.

#### Videodisc Technology

Videodisc technology appears to be one of the most appropriate media sources to help involve individuals in the learning process.

Videodisc has the capability of delivering an instructional program which allows the student to interact with the program. Techniques of simulation and gaming can also be successfully used.

Videodisc consists of a disc, which produces both visual display and sound when "played" by its hardware unit. Currently, there are three different formats used. The Reflective Laser Optical system, developed by MCA and Philips (trade name Laservision), has the most advantages of the three systems (Prince, 1981). With this system, one can choose between standard and extended play discs. The standard type disc contains up to 30 minutes of programming on each side and allows special features such as stop action, slow motion and fast forward. Extended play discs contain up to one hour of viewing on each side of the disc but special effects can not be used with this type of disc. This system also has a special search feature which allows the user to locate a frame or chapter by entering its number on a calculator-type keyboard. This feature is ideal for educational purposes allowing the user to locate a particular section which goes into greater detail about a subject or allowing the user to repeat a certain section on the disc.

Videodisc can be used with a microcomputer system which adds many applications and capabilities to this media. The disc itself is capable of storing large quantities of information. The computer offers branching capabilities to any portion of the lesson. It is possible for the student to control the rate and content of the program using the computer. The computer also allows for feedback of student performance (Utah State University, 1978). With the

accompanying use of a microcomputer, nutrition programs allowing the student to learn good nutrition principles while actually solving personal dietary problems can be realized.

In a study funded by the National Science Foundation, Bunderson et al. (1981) evaluated an intelligent videodisc system. The system consisted of a videodisc player, a computer, an interface between the videodisc player and computer, a TV monitor, a CRT and a keyboard. The course material developed for the instructional program was for a university level developmental biology course. The program included basic conceptual instruction along with laboratory guides and simulations, micrograph files, vocabulary games and drills, and practice instruction in scientific notation. The study compared pre- and post-test scores of students using videodisc instruction and students assigned to a traditional classroom lecture-discussion format. Results of this study showed that students taught by videodisc instruction had significantly higher post test scores than students assigned to the classroom control group. The study also showed that the group instructed using videodisc spent 30 percent less total study time than the classroom control group.

Another study, this one evaluating the HAWK Training System which used an intelligent videodisc system was conducted in April and May of 1982, by WICAT systems at the U.S. Army Air Defense School in Ft. Bliss, Texas (Gibbons et al., 1982). The system consisted of microcomputer controlled by videodisc and a hand held keypad. The program delivered instruction and two-dimensional simulations covering a broad range of weapon systems for use by maintenance and operator

personnel. The system was evaluated to determine the ability of the system to deliver and administer instruction and simulation. Three evaluation groups were used. The first group of sixteen students were given normal classroom instruction followed by a post test. The second group of ten students were given lessons using the HAWK Training System followed by the post test, while group three consisting of twenty students were given both lessons and simulation problems followed by the post test.

Testing results showed that twenty-five percent of the students from group one were able to solve the test question and one hundred percent of the students from groups two and three were able to solve the test question. In addition, the students in group three were able to solve the test question in half the average time of group two students, who received no simulation problem. The authors concluded that computer assisted instruction (CAI) achieved the objective of adequately delivering instruction and that simulation has a more pronounced improvement upon student's efficiency at problem solving.

DeBloois (1982) says that while videodisc has much potential in terms of its instructional capabilities, caution must be taken in not using old instructional techniques on this technology. He discusses principles for designing interactive videodisc instructional materials, one of which is that we must treat videodisc technology as a distinct, new medium.

Another important principle discussed by DeBloois is that of making the design and development of the program an interdisciplinary effort using script writers, computer programmers, subject matter

specialists, evaluation specialists, etc. This is in contrast to previous methods of instructional material development where an instructional designer might complete the entire project on his own. Videodisc Technology is very sophisticated and requires the input from a team of specialists for a quality product.



## METHODOLOGY

### Restatement of Objectives

The purpose of this study was to develop, implement and evaluate a nutrition education program for pilot testing at USU. The objectives were to (1) incorporate current nutrition information into an interactive instructional program on videodisc interfaced with a microcomputer; (2) to pilot test the program using USU student volunteers, and (3) to utilize pre and posttests along with a feedback survey to measure change in nutrition knowledge and to obtain feelings of the participants about the program.

### Research Design

The research design was that used in educational research and development. Review of the literature indicated a need for current nutrition education materials utilizing interactive instructional technology. The instructional program was developed, based on terminal performance objectives, utilizing nutrition information from the Daily Food Guide (USDA, 1980), the Dietary Guidelines for Americans (USDA - DHEW, 1980) and the nutrient density concept. This program was developed into an interactive instructional program on videodisc interfaced with a microcomputer. The pilot testing, using USU student volunteers, was conducted in the USU Audio-Visual Center located in the USU Library. Pre and post tests were administered as part of the instructional program on the videodisc/microcomputer

set-up, along with a feedback survey to determine how participants felt about the program.

#### Description of the Program and Its Development

The program, "Planning for a Better Diet," was developed for use in a pilot testing situation at USU. Student volunteers were recruited for the testing.

The videodisc program was developed such that it could be viewed linearly or, with appropriate computer programming, participants could branch to any area of the program that they desired. For purposes of the pilot testing the programming of critical information was done in a linear manner. Participants were unable to skip segments of the program to ensure that everyone received the same information for testing purposes. However, participants were able to select the order in which they viewed some segments of the program such as the order of viewing the dietary guidelines sections.

The program was developed, based on terminal performance objectives (Appendix A), to teach participants to make informed decisions as to what to eat. The Dietary Guidelines for Americans discussed the association between diet and certain disease conditions while suggesting appropriate dietary intake. The Daily Food Guide was presented as a part of the dietary guideline, "Eat a Variety of Foods" to highlight adequate nutrient intake. The nutrient density concept was used to emphasize the dietary guidance message of making informed food choices. Graphic representations of the nutrient density of a food or meal helped teach the idea of making food selections to obtain



maximum nutrients for the calories provided. Both "positive" and "negative" nutrient contributions of foods were included throughout the program. A general outline of one program is found in Appendix B.

The pre- and post-test and feedback survey were developed for programming on the microcomputer. Testing was built into the instructional program. Quizzes were developed for inclusion at various points in the program but responses were not retained, rather, questions were designed to assist the participant in learning the material given.

In developing the program, the first major consideration was in obtaining an adequate nutrient data base. An existing nutrient data base developed in 1981 at USU was selected for use. The data base includes approximately four hundred and fifty foods from each of the basic food groups outlined in the Daily Food Guide. Foods contained on the data base have values for twenty-eight nutrients. The data base is part of an existing program on microcomputer which analyzes foods or entire meals using the Index of Nutritional Quality (INQ). The INQ value, the actual nutrient content in metric measure along with a graphic representation of the INQ value are presented after inputting the food code and the gram amount of the desired food.

For the nutrition education program on videodisc, only fifteen nutrients were selected for use from the possible twenty-eight. Simplicity of the graphic representations are necessary for quality of the visual display on the Cathode Ray Tube (CRT), hence the reason for fewer nutrients.

The fifteen nutrients selected for use in order of appearance on print-outs and visual display include: energy (calories), vitamin A, vitamin C, thiamin, vitamin B<sub>6</sub>, folacin, calcium, magnesium, iron, zinc, protein, fat, cholesterol, sodium and added sugar. These nutrients were selected for the following reasons.

Calcium, iron, magnesium and vitamin B<sub>6</sub> were included as nutrient density profiles of diets of males and females taken from the Nationwide Food Consumption Survey, 1977-1978, in a study conducted by the U.S. Department of Agriculture showed that the diets provided only 77-99 percent of these nutrients per 1000 kilocalories (Windham et al., 1981).

In a letter to the Journal of Nutrition Education (JNE), Rupenthal (1980) criticizes the choice of certain nutrients used for nutrient density scoring purposes because many enriched and fortified foods appear to have an advantage over unprocessed foods. He cited Pennington's index nutrients; vitamin B<sub>6</sub>, magnesium, vitamin A, pantothenic acid, iron, folacin, and calcium as nutrients to include in a nutrient density scoring system as, "these nutrients ... have been shown to be good indicators of dietary sufficiency." (p. 2).

Pennington, also in a letter to the JNE (1980) discussed the need for use of her suggested index nutrients in nutrient density scoring index nutrients in nutrient density scoring systems to counter balance the nutrient contributions of enriched foods, thereby putting nutrient profiles of processed and unprocessed foods into a more realistic perspective. For this reason, vitamin A and folacin were added to the nutrient list of the educational program. While zinc is not included

on Pennington's list of index nutrients, it was included in the study as it is found in both protein rich foods such as meat and seafood as well as vegetables.

Thiamin was included in the study to represent the B vitamins while vitamin C was included in the hopes that program participants could see how easy it is to obtain adequate amounts of this nutrient without taking supplements. Vitamin C supplementation of the diet seems to be very popular despite the fact that the claims of its benefit have not been sufficiently substantiated.

Protein was deemphasized in the nutrient listing, placing it toward the end of the list. This was done because many individuals have the misconception that if an adequate amount of protein is good, then more is better. Fat, cholesterol, sodium and added sugar were nutrients placed at the end of the listing. These nutrients were included to allow program participants to visualize that while foods do contain "positive" nutrients, that they also include nutrients which can be deemed as "negative" if overly abundant in the diet. Recommendations for specific prudent levels of intake were not given, rather the message delivered was to be aware of nutrient contributions of foods and then make informed choices.

In the computer program, vitamin B<sub>6</sub> values were computed for meeting the percent standard using 0.02 mg per gram of protein eaten. This was done as protein intake seems to influence vitamin B<sub>6</sub> needs. Therefore, man's requirements for the vitamin increase as the protein content of the diet increases (FNB, 1980b).

After determining data base needs, the terminal performance objectives of the program were written (Appendix A). These objectives were developed based on the need for individuals to be able to implement the nutrition principles presented, as indicated in the Review of the Literature of this paper. The program outline was then developed (Appendix B).

Videodisc/Microcomputer Planning Sheets were used to expand the program outlines into storyboard form (Appendix C). The planning sheets are divided into four quadrants which include an area for planning the videodisc display, computer display, audio narration and referencing of sequences. According to DeBloois (1982), this planning sheet helps the program designer think in terms of individualized instruction. The program designer may use reference quadrant of the planning sheet to make notations for branching of the program depending on the participant's desire to learn the unit presented, or skip ahead to other units of instruction. Development of the planning sheets can be a lengthy process depending on the amount of branching and interactivity built into the program. A nice feature in using the planning sheets is that the sequence of the program can be changed in the development process by rearranging the individual planning sheets.

The videodisc/microcomputer planning sheets enable the program designer to then develop the actor's scripts with greater ease. This was the next step in development of the instructional program. First, a general script was written including each actor's dialog. Scripts were reviewed by committee members for an informal evaluation of content and for addition of a humorous sub plot which would not

conflict with the nutrition message but would help to make the learning experience fun for the program participant. A script was also written for the narrator.

The planning sheets also help during the editing process. According to Nugent and Stone (1980) it is very important to use very specific storyboard forms to minimize errors during the editing process as there are many different elements involved in production of a videodisc.

An audition was arranged in Salt Lake City for professional actors for the two lead roles in the program. Applicants read portions of the scripts for one role of the male graduate student/instructor and females nutrition student. The actors were selected for the parts based on youthful appearance, experience, and ability to project a convincing role.

Still frame graphics were next produced for display of nutrient density profiles of each of the Basic Food Groups. Nutrient contributions of foods within a group were averaged to obtain a representative nutrient profile for each food group (Appendix D). Slides of various foods were obtained for the videodisc display to coincide with nutrient profiles of foods displayed on the microcomputer. This was for development of a sequence in the program which allowed participants to view different foods within food groups and see that nutrient contributions of food do vary within each group.

The next step of the program development was to film the running sequences. Filming locations were arranged with local businesses, a private home, and on the USU campus. The idea behind filming was to



show different eating sites and experiences and how to make sensible food selections at each location. One of the locations was a popular nationwide fast food hamburger chain.

A professional cameraman was hired to do the filming who was a valuable source of information during the filming and editing of the program. The majority of the filming was completed in a twelve hour work day. Since film, actor's fees, cameraman's fees and the like are quite expensive, it was of critical importance to complete the filming in a timely manner. While trying to be time efficient, it was impossible to avoid "retakes", especially at the end of the day when the actors (and production crew) became fatigued.

The first edit of the filming was done by the cameraman in his studio. He edited unusable sequences due to poor visual quality or incomplete takes. Another preliminary edit was completed with the production crew. The purpose of the second edit was to decide on each sequence to be included in one final product. This second edit would reduce time spent at the postproduction studio in Salt Lake City thereby reducing postproduction costs.

A full day was scheduled for use of the private postproduction studio in Salt Lake City. Final editing included incorporating the slides, graphic visuals, narration, music and film into the videodisc. Computer generated graphics were used to complete one package. Decision making at this point in the editing process was shared among the producer, coproducer and script writer, cameraman and depended on the capabilities of the post production equipment.



After the filming and editing processes were completed, a final decision on the interactivity of the program was made. This changed somewhat from the initial plan due to decisions that were made during the final edit of the videodisc. Copies of pre and posttests and feedback surveys were distributed to experts in the USU Nutrition and Food Sciences Department and Instructional Technology Department for content validity and were found to be acceptable. Minor changes were made at the suggestion of some of those who reviewed the tests.

At this point, the materials were given to a computer programmer. Minor changes in wording were made in some statements and questions in order to fit on the visual display. The programmer was able to adapt the program to be displayed from one screen instead of two, so adjustments were made to allow for this. The program was originally designed for a two screen presentation. Therefore, some visuals were not used as the printed graphics were needed for program continuity. A one screen presentation is the method of choice as the participant does not need to watch for visual displays on two screens. The programming involved for a one screen display is more difficult and more time-consuming.

#### Description of the Subjects

The subjects used for pilot testing of the program were USU student volunteers. Some students were recruited as they studied in the USU library and others were recruited from nearby classes. Seventeen students completed the pilot testing. It was not known if the students had any previous instruction in nutrition.

### Description of Instrumentation

Two instruments were developed and utilized to collect data for the research study. These were the pre and posttest and a feedback survey. The pre and posttest was used to measure change in nutrition knowledge of students before and after the treatment. The feedback survey was used to obtain participants' feelings about the program content and the use of videodisc/microcomputer technology.

#### Pre and Posttest

Criterion referenced pre and posttests were administered as a part of the instructional program. The pre test was given prior to the instructional program and the posttest given afterwards. The tests consisted of 23 multiple-choice questions and 1 true-false statement (Appendix E). Each question corresponded to one of the terminal performance objectives (Appendix A).

The first draft of the pre and posttest and feedback survey was reviewed by nutritionists and educators for content validity and for understandability. The test questions were overall rated very valid. Changes were made in the wording of some questions as suggested by those reviewing the tests to improve their validity. After revision, the pre and posttest were included on the microcomputer program.

#### Feedback Survey

The feedback survey was designed for obtaining feelings about the program content and the use of the videodisc hardware. Nutritionists and educators reviewed its content. Questions were added on recommendation of one educator. The final draft was composed of 10

questions, five related to the program content and five related to the hardware and its use. Choices of response to these questions included strongly agree, agree, disagree and strongly disagree.

#### Data Processing and Analysis

The data were recorded directly onto the microcomputer software during the testing. When pilot testing was completed, the data from pre and posttests and feedback surveys were retrieved. Data were statistically analyzed using a hand calculator with statistical functions.

Pre and posttest data were analyzed using a correlated t test to determine if there was a significant difference in the mean scores of the tests. The null and alternate hypotheses tested were:

$$H_0: M_1 - M_2 = 0$$

$$H_a: M_1 - M_2 \neq 0$$

where  $M_1$  represented pretest values and  $M_2$  represented post-test values.

No statistical procedures were used to interpret the feedback survey data.

## RESULTS

### Restatement of the Problem

While health conscious Americans seem to desire dietary intake of a prudent nature, they are unsuccessful at making significant alterations in their diets to accomplish this objective.

Nutrition education materials have traditionally addressed the need for nutritional adequacy of the diet. Use of interactive instructional technology has not been explored to enhance the delivery of nutrition education topics.

Nutrition education materials which address both nutritional adequacy of the diet and prudent dietary selections are needed. Use of interactive instructional technology is also needed to facilitate learning.

### Results

The results of the pilot testing are summarized in Tables 1 and 2. Table 1 shows pre and posttest scores and responses to the feedback survey. Table 2 gives an in-depth summary of responses to the feedback survey.

The mean score on the posttest was 79.71%, an increase of 1.47% from the pretest score of 78.24%. The standard deviation on the posttest was 8.08% as compared with 10.5% on the pretest. Pretest scores ranged from 50 to 96% and posttest scores ranged from 67 to 96%.

Table 1. Participant's scores on pretest and posttest and responses to the feedback survey.

| Subject Number | Test Scores              |      |                           |      | Feedback Responses           |       |                  |    |    |    |    |    |    |    |    |    |  |
|----------------|--------------------------|------|---------------------------|------|------------------------------|-------|------------------|----|----|----|----|----|----|----|----|----|--|
|                | 24 Questions Pretest (%) |      | 24 Questions Posttest (%) |      | Pretest-Posttest Changes (%) |       | Question Number: |    |    |    |    |    |    |    |    |    |  |
|                |                          |      |                           |      |                              |       | 49               | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 |  |
| 1              | 16                       | (67) | 19                        | (79) | +3                           | (+12) | 2                | 1  | 1  | 1  | 2  | 1  | 2  | 2  | 2  | 1  |  |
| 2              | 20                       | (83) | **23                      | (96) | +3                           | (+13) | 1                | 1  | 1  | 2  | 2  | 1  | 2  | 2  | 1  | 2  |  |
| 3              | 20                       | (83) | **21                      | (88) | +1                           | (+5)  | 1                | 2  | 2  | 1  | 2  | 1  | 1  | 1  | 2  | 2  |  |
| 4              | 19                       | (79) | 19                        | (79) | 0                            | (0)   | 1                | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 2  | 2  |  |
| 5              | 18                       | (75) | 16                        | (67) | -2                           | (-8)  | 1                | 2  | 1  | 2  | 2  | 1  | 1  | 2  | 1  | 1  |  |
| 6              | 23                       | (96) | **21                      | (88) | -2                           | (+8)  | 2                | 2  | 2  | 1  | 1  | 1  | 3  | 1  | 1  | 1  |  |
| 7              | 18                       | (75) | 16                        | (67) | -2                           | (-8)  | -                | 2  | 3  | 2  | 2  | 4  | 1  | 4  | 3  | 2  |  |
| 8              | 21                       | (88) | **22                      | (92) | +1                           | (+4)  | 1                | 2  | 1  | 2  | 2  | 2  | 2  | 1  | 3  | 2  |  |
| 9              | 18                       | (75) | 18                        | (75) | 0                            | (0)   | 1                | 2  | 2  | 1  | 2  | 2  | 1  | 1  | 1  | 1  |  |
| 10             | 20                       | (83) | **20                      | (83) | 0                            | (0)   | 2                | 2  | 2  | 2  | 3  | 2  | 3  | 1  | 2  | 2  |  |
| 11             | 19                       | (79) | 19                        | (79) | 0                            | (0)   | 1                | 1  | 1  | 1  | 2  | 1  | 1  | 1  | 2  | 1  |  |
| 12             | 21                       | (88) | 18                        | (75) | -3                           | (-13) | 2                | 2  | 2  | 1  | 2  | 2  | 1  | 1  | 1  | 1  |  |
| 13             | 12                       | (50) | 18                        | (75) | +6                           | (+25) | 1                | 2  | 2  | 2  | 2  | 2  | 3  | 1  | 2  | 2  |  |

Table 1. (continued)

| Subject Number     | Test Scores              |         |                           |         | Feedback Responses           |           |      |      |      |                  |      |      |      |      |      |      |
|--------------------|--------------------------|---------|---------------------------|---------|------------------------------|-----------|------|------|------|------------------|------|------|------|------|------|------|
|                    | 24 Questions Pretest (%) |         | 24 Questions Posttest (%) |         | Pretest-Posttest Changes (%) |           | 49   | 50   | 51   | Question Number: |      |      |      |      |      |      |
|                    |                          |         |                           |         |                              |           |      |      |      | 52               | 53   | 54   | 55   | 56   | 57   | 58   |
| 14                 | 16                       | (67)    | 17                        | (71)    | +1                           | (+4)      | 2    | 1    | 1    | 2                | 1    | 1    | 1    | 1    | 1    | 1    |
| 15                 | 19                       | (79)    | 19                        | (79)    | 0                            | (0)       | 2    | 2    | 2    | 3                | 3    | 3    | 2    | 2    | 2    | 2    |
| 16                 | 21                       | (88)    | 19                        | (79)    | -2                           | (-9)      | 2    | 1    | 1    | 1                | 1    | 2    | 1    | 1    | 1    | 1    |
| 17                 | 18                       | (75)    | **20                      | (83)    | +2                           | (+8)      | 1    | 2    | 2    | 2                | 2    | 2    | 3    | 1    | 1    | 1    |
| ***Mean            | 18.76                    | (78.24) | 19.11                     | (79.71) | 0.35                         | (1.47)    | 1.44 | 1.71 | 1.65 | 1.65             | 1.82 | 1.71 | 1.71 | 1.41 | 1.65 | 1.47 |
| Standard Deviation | 2.51                     | (10.50) | 1.93                      | (8.08)  | 2.29                         | (9.57)    | -    | -    | -    | -                | -    | -    | -    | -    | -    | -    |
| Range              | 12-23                    | (50-96) | 16-23                     | (67-96) | -3-+6                        | (-13-+25) | 1-2  | 1-2  | 1-3  | 1-3              | 1-3  | 1-4  | 1-3  | 1-4  | 1-3  | 1-2  |

- Indicates the item was not completed by the participant.

\*\* Indicates achievement of the 80% criterion (total of 6 subjects or 35%).

\*\*\* Computed on the basis of n=number of completed responses to that item.



While there was a 1.47% increase in the mean from pretest to posttest scores, a correlated t test was used to determine if this difference was significant. The decision rule was:

$$H_0: \mu_1 - \mu_2 = 0$$

$$H_a: \mu_1 - \mu_2 \neq 0$$

Testing failed to reject the null hypothesis, therefore, there was no significant difference in pre and posttest mean scores at the 1 percent level.

### Feedback Responses

Responses to the feedback survey are summarized in Tables 1 and 2. Feedback responses were very positive overall. The majority of responses to the ten statements indicated that the participants agreed or strongly agreed with the statements.

Of particular interest was the response to statement number 1. 56.2% strongly agreed that they would eat the meals and snacks that they planned during the program. Analysis of menus planned was not able to be done as the majority of participants took the computer print-out with them upon completing the program. 70.6% of the participants strongly agreed that the equipment was relatively easy to use. Statement number 10 also drew responses primarily in the strongly agree category. Participants found that the information provided was at a level appropriate for their understanding.

The mean responses of the remaining seven statements showed that the participants agreed with the statements. After completing the

program, many participants verbally complimented the program and most seemed enthusiastic about it.

Table 2. Summary of responses to feedback survey.

| Statement Number | Statement  | -1-<br>percent<br>strongly<br>agree | -2-<br>percent<br>agree | -3-<br>percent<br>disagree | -4-<br>percent<br>strongly<br>disagree | Mean<br>Response          |
|------------------|--|-------------------------------------|-------------------------|----------------------------|--|---------------------------|
| 1.               | The meals and snacks I have just planned as an exercise in this program I would actually eat.                          | 56.2                                | 43.8                    | 0                          | 0                                      | 1.44<br>strongly<br>agree |
| 2.               | This program has increased my knowledge of appropriate dietary practices.  | 29.4                                | 70.6                    | 0                          | 0                                      | 1.71<br>agree             |
| 3.               | The "Dietary Guidelines" will be useful to me in making food choices.  | 41.2                                | 52.9                    | 5.88                       | 0                                      | 1.65<br>agree             |
| 4.               | The "Index of Nutritional Quality" has increased my understanding of the "Dietary Guidelines."                         | 41.2                                | 52.9                    | 5.88                       | 0                                      | 1.65<br>agree             |
| 5.               | I plan on making changes in my current eating habits to more closely follow the information presented in this program. | 17.6                                | 70.6                    | 11.8                       | 0                                      | 1.82<br>agree             |
| 6.               | I prefer this self-paced interactive program over conventional classroom learning.                                     | 47.1                                | 41.2                    | 5.88                       | 5.88                                   | 1.71<br>agree             |

Table 2. (continued)

| Statement Number | Statement   | -1-<br>percent<br>strongly<br>agree | -2-<br>percent<br>agree | -3-<br>percent<br>disagree | -4-<br>percent<br>strongly<br>disagree | Mean<br>Response          |
|------------------|---|-------------------------------------|-------------------------|----------------------------|--|---------------------------|
| 7.               | This program was paced at an appropriate speed.                           | 53.0                                | 23.5                    | 23.5                       | 0                                      | 1.71<br>agree             |
| 8.               | I was able to work the equipment with relative ease.                      | 70.6                                | 23.5                    | 5.9                        | 0                                      | 1.41<br>strongly<br>agree |
| 9.               | The instructions provided throughout the program were adequate.           | 47.1                                | 41.2                    | 11.8                       | 0                                      | 1.65<br>agree             |
| 10.              | The information provided was at a level appropriate for my understanding. | 52.9                                | 47.1                    | 0                          | 0                                      | 1.47<br>strongly<br>agree |

## DISCUSSION

### Major Findings

The test scores of participants who completed the nutrition education program increased an average of 1.47 percentage points from pre- to post-test. A correlated t test was utilized to determine significance of the data at the 1 percent level. Testing failed to reject the null hypothesis and therefore it was concluded that there was no significant difference between mean scores of pre- and post-test.

Responses to the feedback survey were very positive overall. Most participants felt that their nutrition knowledge had increased and that the information presented to them would help them in making prudent food choices. Responses were also favorable regarding the interactivity of the instructional program and the ease with which they were able to work with the hardware. Participants also agreed that the level of information given in the program was at a level appropriate for their understanding.

### Discussion

The mean values of nutrition test scores in the pilot test did increase but did not prove to be statistically significant. This would seem to indicate that the nutrition education program was not effective in significantly increasing the nutrition knowledge of participants involved in the pilot test. However, participants' responses to question number 2 of the feedback survey, "This program

has increased my knowledge of appropriate dietary practices," were 29.4 percent "strongly agree" and 70.6 percent "agree." Since learners felt that they had indeed increased their nutrition knowledge, it seems unlikely that the program is truly ineffective.

The majority of participants, 52.9 percent, "strongly agreed" to question number 10 of the feedback survey and 47.1 percent "agreed" that "The information provided was at a level appropriate for my understanding." It appears that the program content is appropriate for college age learners.

It is possible that the testing was not rigorous enough to determine whether the program is effective in teaching the specified nutrition principles. While the pre- and post-test were assessed for content validity, perhaps the questions were too easy. This is a possible cause for the high scores obtained on the pretest. Thirty-five percent of the participants had scores of 80 percent or greater on the pretest. The high score on both the pre- and post-test was 96 percent, which leaves little room for improvement. Another factor in the high pretest scores could be that some participants may have had previous instruction in the nutrition principles presented. Since the participants were volunteers, it was not known the degree of previous nutrition instruction, if any, they had received.

Of note was the range in pretest and posttest scores. Pre-test scores ranged from 50-96% and post-test scores ranged from 67-96%. From this data, it appears that the lower scores improved considerably after the instruction. Participants who scored below 70 percent on



the pretest improved their test scores to above 70 percent on the posttest.

Achievement of the 80 percent correct criterion from the terminal performance objectives was met by 35 percent of the participants. This went unchanged from the pretest.

Achievement of performance objective number 8, "Plan meals and snacks for a period of twenty-four hours," could not be assessed as participants took their computer print-out with them by mistake. The feedback survey indicates that program participants agreed that they would actually eat the meals that they had planned. Whether these meals were nutritious or not remains unknown.

Responses to feedback survey question number 6, "I prefer this self-paced interactive program over conventional classroom learning" were on the average agreeable. However, this is the only question that drew a "strongly disagree" response. People respond differently to various techniques used in instruction. Perhaps this individual responds better to instruction in a conventional classroom setting or he may feel intimidated by the videodisc/microcomputer software.

#### Summary and Conclusions

A review of the literature indicated a need for nutrition education materials to be current with prevailing scientific knowledge, using advanced instructional technology. New approaches to nutrition education are needed. Health conscious individuals need help applying present-day nutrition principles to their dietary practices.

A nutrition education program for use on videodisc was developed and implemented. While evaluation of the program did not prove to be effective statistically, learners showed interest in the program and seemed to have positive feelings about the information presented and the technology used. Also, participants felt that the program content was appropriate for their understanding.

#### Recommendations

The pilot testing completed at USU is encouraging. However, it appears that more rigorous testing is needed to determine the effectiveness of teaching current nutrition principles using videodisc technology.

Another thorough evaluation of the pre and posttest should be completed with appropriate changes made as indicated. A suitable group of participants should be selected who would have substantial motivation to learn the program material to score favorably on the posttest. A likely group of candidates would be students enrolled in USU's NFS 122 course, which is an introductory nutrition course. Preferably, implementation of the program would be during the first week of classes before instruction of topics covered on the videodisc program are presented. A control group should be included so that appropriate comparisons can be made.

Helping individuals learn to make prudent dietary selections is an important aspect of this program. Having program participants plan food intake for a 24 hour period and analyzing the data would be helpful to determine types of menus they would plan upon completion of

the program. This information would identify if indeed program participants did plan prudent dietary intake.

An attitude survey would be of interest to measure attitudinal and behavioral changes in program participants. A comparison of attitudes of those taught in a traditional lecture-discussion format with those taught using the interactive instructional program on videodisc would lend further insight into a preferable instructional approach for this type of nutritional information.

## LITERATURE CITED

- Bray, G.A. 1980. Dietary guidelines: The shape of things to come. J. Nutr. Ed. 12:97-99.
- Brown, G., Wyse, B.W. and Hansen, R.G. 1979. A nutrient density, nutrition education program for elementary schools. J. Nutr. Ed. 11:(No. 1).
- Bunderson, C.V., Olsen, J.B. and Baillio, B. 1981. Final report: Proof of concept demonstration and comparative evaluation of a prototype intelligent videodisc system. Orem, Utah: WICAT. Unpublished.
- Christopher, C., Shannon, B. and Sims, L.S. 1980. A multimedia approach to teaching nutrition. J. Nutr. Ed. 12:8-12.
- DeBloois, M.L. 1982. Principles for designing interactive videodisc instructional materials. pp. 25-65. in M.L. DeBloois ed. Videodisc/microcomputer courseware design. Englewood Cliffs, New Jersey: Educational Technology Publications.
- FNB (Food and Nutrition Board, National Research Council). 1980a. Toward healthful diets. Washington: National Academy of Sciences.
- FNB (Food and Nutrition Board, National Research Council). 1980b. Recommended dietary allowances, 9th ed. Washington: National Academy of Sciences.
- German, M.J. 1980. A nutrition education component for high school health curriculums. Master's Thesis, Utah State University.
- Gibbons, A.S., Olsen, J.B. and Cavaghol, R.M. 1982. Hawk training system: Evaluation report. Orem, Utah: WICAT. Unpublished.
- Hansen, R.G. 1973. An index of food quality. Nutr. Rev. 31: pp. 1-7.
- Hansen, R.G. and Wyse, B.W. 1980a. Nutrient density to evaluate your diet. The Professional Nutritionist. 12: pp. 4-5, 10-14.
- Hansen, R.G. and Wyse B.W. 1980b. Expression of nutrient allowances per 1,000 kilocalories. J. Am. Dietet. Assoc. 76:3.
- Jones, J.L. and Weimer, J. 1981. Health-related food choices. Family Economics Review. Summer, pp. 16-19.

- Light, L. and Cronin, F.J. 1981. Food guidance revisited. J. Nutr. Ed. 13: pp. 57-62.
- Maretzki, A.N. 1979. A perspective on nutrition education and training. J. Nutr. Ed. 11:176-180.
- Mason, D.T. and Guthrie, H. 1979. The medicine called nutrition. Westport, Connecticut: Medical Education Programs, Ltd.
- McNutt, K.W. 1981. How contemporary is our nutrition education? Contemporary Nutrition 6:1-2.
- NAS Committee lists guidelines to prevent cancer. 1982. CNI (Community Nutrition Institute) Weekly Report. June 17, pp. 1-2.
- Nugent, G.C. and Stone, C.G. 1980. Videodisc instructional design. Ed. Tech. May:29-32.
- Pennington, J.A.T. 1980. Pennington comments. J. Nutr. Ed. 12:3.
- Prince, S.D. 1981. The thinking man's guide to videodisc players. Videoplay. July:38-57.
- Rupenthal, B. 1980. Index nutrients questioned. J. Nutr. Ed. 12:2.
- Spitzer, D.R. 1980. Toward response based educational technology. Ed. Tech. May:33-35.
- USDA (U.S. Department of Agriculture). 1980. The hassle-free guide to a better diet. Leaflet No. 567. Washington: U.S. Government Printing Office.
- USDA (U.S. Department of Agriculture). 1981. Ideas for better eating: menus and recipes to make use of the dietary guidelines. Washington: U.S. Government Printing Office.
- USDA-DHHS (U.S. Department of Agriculture - Department of Health, Education and Welfare). 1980. Dietary guidelines for Americans. Home and Garden Bulletin No. 232. Washington: U.S. Government Printing Office.
- USDHEW/PHS (U.S. Department of Health, Education and Welfare - Public Health Service). 1979. Healthy people: The Surgeon General's report on health promotion and disease prevention. DHEW/PHS Publication No. 79-55071. Washington.
- Utah State University. 1978. Videodisc comparisons with books, television and computer. Unpublished.

- Wardlaw, J.M. 1981. Preparing the nutrition education professional for the 1980's. *J. Nutr. Ed.* 13:6-8.
- White, P.L. 1976. Why all the fuss over nutrition education. *J. Nutr. Ed.* 8:54.
- Windham, C.T., Wyse, B.W., Hansen, R.G. and Hurst, R.L. 1983. Nutrient density of diets in the USDA nationwide food consumption survey, 1977-1978: I. Impact of socioeconomic status on dietary density. *J. Am. Dietet. Assoc.* 82:28-34.
- Windham, C.T., Wyse, B.W., Hurst, R.L. and Hansen, R.G. 1981. Consistency of nutrient consumption patterns in the United States. *J. Am. Dietet. Assoc.* 78:587-595.
- Wittich, W.A. and Schuller, C.F. 1979. *Instructional technology: Its nature and use.* Sixth Ed. New York: Harper and Row.
- Wittwer, A.J., Sorensen, A.W., Wyse, B.W. and Hansen, R.G. 1977. Nutrient density: Evaluation of nutritional attributes of foods. *J. Nutr. Ed.* 9:26-30.



APPENDICES

Appendix A  
Terminal Performance Objectives

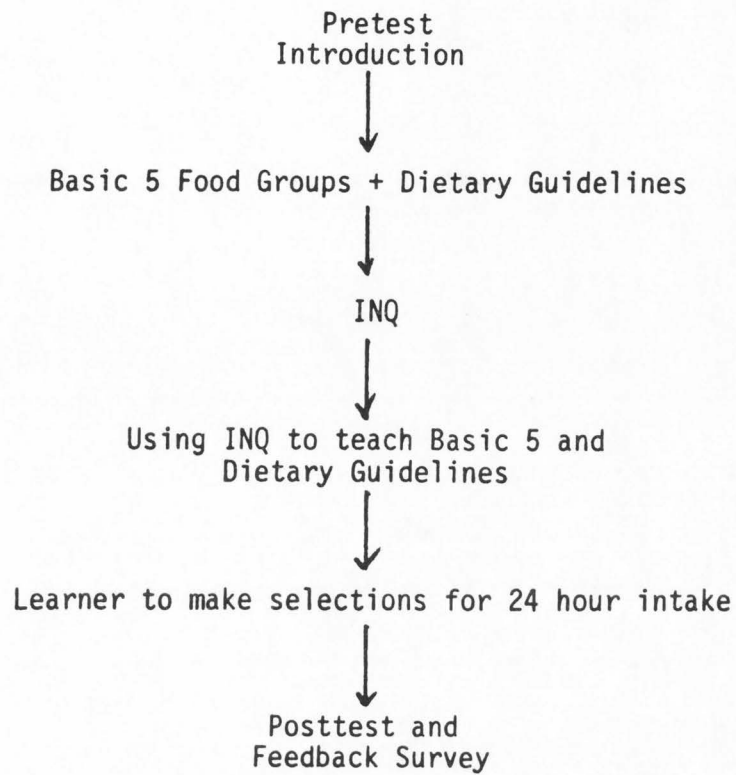
### Terminal Performance Objectives

Upon completion of the nutrition education programd, the student will be able to do the following with at least 80% accuracy on the corresponding computerized criterion referenced test:

1. Identify the seven dietary guidelines as outlined in the instructional program.
2. Identify specific nutritional components of each dietary guideline.
3. Recognize disease conditions which have been associated with over consumption of specific nutrients.
4. Identify the correct meaning of the terms nutrient dense and calorie dense.
5. Identify the nutrients which are found in good supply in a food when compared with its energy contributions.
6. Evaluate a meal determining if it is nutrient dense or calorie dense.
7. Revise a calorie dense meal making it nutrient dense.
8. Plan meals and snacks for a period of twenty-four hours.

Appendix B  
General Program Outline

## General Program Outline



Appendix C

Videodisc/Microcomputer Planning Sheets



VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>FL | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|----------------|-----------------------|---------------|-----------|
| NEXT           |                       | QUESTION      |           |
| BACK           |                       | INDEX PAGE    |           |
| SHIFT OVER     |                       | REMEDATION    |           |
| HELP           |                       | HELP PAGE     |           |
| AUTO-ADV.      |                       | REINFORCEMENT |           |
|                |                       | TESTING       |           |
|                |                       | OBJECTIVE     |           |
|                |                       | LESSON        |           |
|                |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1991

AUDIO NARRATION

Track 1  
 Track 2

THEME MUSIC UP AND OUT

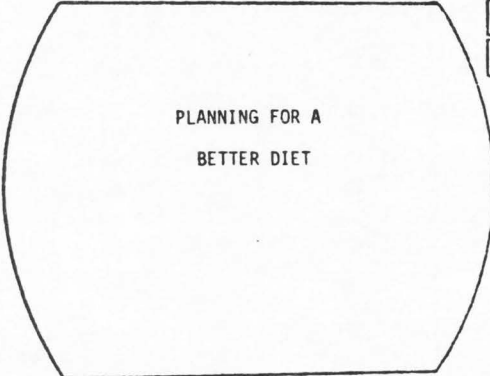
AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO


- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- VIDEOGRAPHIC
- ( ) OTHER

NO LINK



PLANNING FOR A  
BETTER DIET

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION* |
|--------------|--------------------|---------------|------------|
| NEXT         |                    | QUESTION      |            |
| BACK         |                    | INDEX PAGE    |            |
| SHIFT ONLY   |                    | REMEDATION    |            |
| HELP         |                    | HELP PAGE     |            |
| DATA-ADD.    |                    | REINFORCEMENT |            |
|              |                    | TESTING       |            |
|              |                    | OBJECTIVE     |            |
|              |                    | LESSON        |            |
|              |                    | OTHER         |            |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

(X) Track 1 NARRATOR 1  
( ) Track 2

EATING IS AN ACTIVITY THAT WE ALL ENGAGE IN SEVERAL TIMES A DAY .... HOWEVER THIS DOESN'T MAKE US EXPERTS IN THE FIELD OF NUTRITION. WHILE MOST AMERICANS MAKE FAIRLY GOOD FOOD SELECTIONS, THE MAJORITY OF US COULD MAKE IMPROVEMENTS IN THIS AREA. WITH CURRENT RESEARCH INDICATING AN ASSOCIATION BETWEEN DIET AND DISEASE, THESE IMPROVEMENTS COULD BE CRUCIAL TO GOOD HEALTH. THIS PROGRAM WILL TEACH YOU GOOD NUTRITION PRACTICES AND WILL HELP YOU TO MAKE FOOD SELECTIONS BASED ON THIS INFORMATION.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

NO LINK

MENDENHALL DINNER SCENE

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>E.L. | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|------------------|-----------------------|---------------|-----------|
| NEWS             |                       | QUESTION      |           |
| TEXT             |                       | INDEX PAGE    |           |
| OBJECTIVE        |                       | REMEDATION    |           |
| HELP             |                       | HELP PAGE     |           |
| INTER-APP.       |                       | REINFORCEMENT |           |
|                  |                       | TESTING       |           |
|                  |                       | OBJECTIVE     |           |
|                  |                       | LESSON        |           |
|                  |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 N: LET'S LISTEN NOW WHILE BOB - A GRADUATE STUDENT IN  
 Track 2 THE NUTRITION DEPARTMENT OF A MAJOR UNIVERSITY -  
 DISCUSSES SOME IMPORTANT NUTRITION CONCEPTS WITH  
 HIS CLASS.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

FADE IN BOB

TEACHING CLASS

VIDEO RUN TIME (SEC.)

CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO 
  
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>FILE | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|------------------|-----------------------|---------------|-----------|
| MENU             |                       | QUESTION      |           |
| HELP             |                       | INDEX PAGE    |           |
| CHIEF FILE       |                       | REMEDATION    |           |
| HELP             |                       | HELP PAGE     |           |
| APPENDIX         |                       | REINFORCEMENT |           |
|                  |                       | TESTING       |           |
|                  |                       | OBJECTIVE     |           |
|                  |                       | LESSON        |           |
|                  |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 NARRATOR 1  
 Track 2

MAKING FOOD CHOICES IS OFTEN A PROBLEM. THESE  
 DECISIONS ARE MORE DIFFICULT IF YOU HAVE A  
 HEALTH PROBLEM SUCH AS HIGH BLOOD PRESSURE  
 OR DIFFICULTY IN CONTROLLING YOUR WEIGHT

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VISUAL OF BOB TEACHING  
CLASS

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  PREFACE 1.2 INST'L. UNIT  TO  VIDEODISC  FRAME #

| FUNCTION REF | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEXT         |                    | QUESTION      |           |
| BACK         |                    | INDEX PAGE    |           |
| CHIEF CLIP   |                    | REMEDATION    |           |
| HELP         |                    | HELP PAGE     |           |
| REINFORC.    |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

**COMPUTER DISPLAY**

HIGHLIGHT ONE AT A TIME AS MENTIONED:

1. EAT A VARIETY OF FOODS
2. MAINTAIN IDEAL WEIGHT
3. AVOID TOO MUCH FAT & CHOLESTEROL
4. EAT FOODS WITH ADEQUATE STARCH & FIBER
5. AVOID TOO MUCH SUGAR
6. IF YOU DRINK ALCOHOL, DO SO IN MODERATION
7. AVOID TOO MUCH SODIUM

© CIPD 1991

**AUDIO NARRATION**

(\*) Track 1 BOB: TO AID YOU IN MAKING APPROPRIATE FOOD CHOICES  
 ( ) Track 2 A LIST OF GUIDELINES HAS BEEN DEVELOPED.  
 THESE ARE:

1. EAT A VARIETY OF FOODS
2. MAINTAIN IDEAL WEIGHT
3. AVOID TOO MUCH FAT & CHOLESTEROL
4. EAT FOODS WITH ADEQUATE STARCH & FIBER
5. AVOID TOO MUCH SUGAR
6. IF YOU DRINK ALCOHOL, DO SO IN MODERATION

AUDIO RUN TIME (SEC.)  (38)


**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LIMITED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 (X) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

BOB IN BACKGROUND FADE OUT

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION   | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|------------|--------------------|---------------|-----------|
| NEWS       |                    | QUESTION      |           |
| INDEX      |                    | INDEX PAGE    |           |
| CHIEF      |                    | REMEDATION    |           |
| HELP       |                    | HELP PAGE     |           |
| ANTHROPOL. |                    | REINFORCEMENT |           |
|            |                    | TESTING       |           |
|            |                    | OBJECTIVE     |           |
|            |                    | LESSON        |           |
|            |                    | OTHER         |           |

COMPUTER DISPLAY

IT IS NOT NECESSARY TO ELIMINATE ANY ONE FOOD ENTIRELY FROM THE DIET. APPROPRIATE SELECTIONS SHOULD BE MADE SO THAT NUTRIENT REQUIREMENTS FOR VITAMINS, MINERALS AND TRACE ELEMENTS ARE MET WHILE STAYING WITHIN LIMITS FOR CALORIES, SODIUM, SUGAR, FAT AND CHOLESTEROL. AS YOU CAN SEE, DIETARY SELECTIONS SHOULD BE BASED ON SEVERAL FACTORS. IT IS UP TO EACH INDIVIDUAL TO DECIDE WHAT CHOICES TO MAKE.

© CIPD 1981

AUDIO NARRATION

Track 1 NARRATOR  
 Track 2

THIS INFORMATION IS TO HELP YOU MAKE INFORMED CHOICES IN REGARDS TO WHAT YOU CHOOSE TO EAT.  
 (COMES UP AFTER 7 SECONDS)  
 LET'S BEGIN BY LOOKING AT THE GUIDELINES

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

WIPE WITH COLOR

VIDEO RUN TIME (SEC.)



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.0 INST'L. UNIT  VIDEODISC TO  FRAME #

| FUNCTION<br>FILE | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|------------------|-----------------------|---------------|-----------|
| MENU             |                       | QUESTION      |           |
| INDEX            |                       | INDEX PAGE    |           |
| CHIEF            |                       | REMEDATION    |           |
| HELP             |                       | HELP PAGE     |           |
| REINFORC.        |                       | REINFORCEMENT |           |
|                  |                       | TESTING       |           |
|                  |                       | OBJECTIVE     |           |
|                  |                       | LESSON        |           |
|                  |                       | OTHER         |           |

COMPUTER DISPLAY

DIETARY GUIDELINES:

1. EAT A VARIETY OF FOODS
2. MAINTAIN IDEAL WEIGHT
3. AVOID TOO MUCH FAT AND CHOLESTEROL
4. AVOID TOO MUCH SUGAR
5. IF YOU DRINK, DO SO IN MODERATION
6. AVOID TOO MUCH SODIUM AND SALT
7. EAT FOODS WITH ADEQUATE STARCH & FIBER

WHICH GUIDELINE DO YOU WANT TO LOOK AT FIRST?

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

CONCEPTUALLY LINKED TO  
  
  
 TO LINK

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION # | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|------------|--------------------|---------------|-----------|
| NEW        |                    | QUESTION      |           |
| REF        |                    | INDEX PAGE    |           |
| ENHANCE    |                    | REMEDATION    |           |
| HELP       |                    | HELP PAGE     |           |
| DATA-ADD   |                    | REINFORCEMENT |           |
|            |                    | TESTING       |           |
|            |                    | OBJECTIVE     |           |
|            |                    | LESSON        |           |
|            |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

EAT A VARIETY  
OF FOODS

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  VARIETY 2.1 INST'L. UNIT  TO  VIDEODISC TO  FRAME #

| FORMATION UNIT | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------------|--------------------|---------------|-----------|
| NEWS           |                    | QUESTION      |           |
| INDEX          |                    | INDEX PAGE    |           |
| REMEDIAL       |                    | REMEDIAL      |           |
| HELP           |                    | HELP PAGE     |           |
| REINFORCEMENT  |                    | REINFORCEMENT |           |
| TESTING        |                    | TESTING       |           |
| OBJECTIVE      |                    | OBJECTIVE     |           |
| LESSON         |                    | LESSON        |           |
| OTHER          |                    | OTHER         |           |

COMPUTER DISPLAY

(FLASH NAME OF GROUP WHEN PICTURE OF GROUP APPEARS IN VIDEODISC)

\*1. EAT A VARIETY OF FOODS

MAINTAIN IDEAL WEIGHT  
 AVOID TOO MUCH FAT AND CHOLESTEROL  
 AVOID TOO MUCH SUGAR  
 IF YOU DRINK ALCOHOL, DO SO IN MODERATION  
 EAT FOODS WITH ADEQUATE STARCH AND FIBER  
 AVOID TOO MUCH SODIUM AND SALT

© CIPD 1981

AUDIO NARRATION

(X) Track 1 EATING A VARIETY OF FOODS IS ONE OF THE 7 DIETARY GUIDELINES. THE BEST METHOD OF INCORPORATING A WIDE VARIETY OF FOODS IN THE DIET IS TO USE THE "HASSLE-FREE GUIDE TO A BETTER DIET," WHICH BREAKS DOWN FOOD CHOICES INTO FIVE BASIC GROUPS. LET'S REVIEW THESE FIVE FOOD GROUPS.

(O) Track 2

(HAVE A NARRATOR LIST EACH FOOD GROUP ONE AT A TIME AND HAVE PICTURE COME UP AS MENTIONED.)

|                        |   |
|------------------------|---|
| VEGETABLES AND FRUITS  | MEAT, POULTRY, FISH AND BEANS                 |
| BREAD AND CEREAL GROUP | FATS, SWEETS AND ALCOHOL GROUP                |
| MILK AND CHEESE GROUP  | AUDIO RUN TIME (SEC.) <input type="text"/> 19 |


VIDEODISC DISPLAY

(O) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 (X) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 (X) VIDEOGRAPHIC  
 ( ) OTHER

SHOW PICTURES OF EACH OF 5  
 FOOD GROUPS - ONE AT A TIME  
 (MONTAGE)

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

COURSE   
  MODULE/FILE   
  INST'L. UNIT   
  VIDEODISC TO  FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MENU      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| CHIEF     |                    | REMEDATION    |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORC. |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

(K) Track 1 THE FIRST GROUP WE WILL LOOK AT IS THE VEGETABLE AND  
 (I) Track 2 FRUIT GROUP. THESE FOODS ARE IMPORTANT SOURCES OF VIT.  
 A AND C AND FIBER. DARK GREEN + DEEP YELLOW VEGETABLES  
 ARE GOOD SOURCES OF VIT. A. DARK GREEN VEGETABLES ALSO CONTAIN  
 FOLACIN, IRON AND MAGNESIUM. GOOD SOURCES OF VIT. C ARE  
 CITRUS FRUITS, BERRIES, TOMATOES AND MELONS. FRUITS AND  
 VEGETABLES TEND TO BE LOW IN FAT AND NONE CONTAINS CHOLESTEROL.

FOUR SERVINGS FROM THIS GROUP EACH DAY IS RECOMMENDED

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO


MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

ONE SERVING = 1/2 CUP  
OR

ONE ORANGE  
ONE MEDIUM POTATO  
1/2 GRAPEFRUIT

(SHOW PICTURE OF FRUITS AND VEGETABLES  
IN THE BACKGROUND)

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  VARIETY 2.1.2 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| NEXT      |                    | QUESTION      |           |
| BACK      |                    | INDEX PAGE    |           |
| CHIT CHAT |                    | REMEDIATION   |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
|           |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

COMPUTER DISPLAY

AFTER AUDIO: PRINT: IF YOU WOULD LIKE TO SEE A LIST OF THESE FOODS, PRESS THE SPACE BAR. IF NOT, PRESS RETURN TO CONTINUE.

© CIPO 1991

AUDIO NARRATION

Track 1 THE BREAD AND CEREAL GROUP INCLUDES ALL PRODUCTS MADE WITH WHOLE GRAINS OR ENRICHED FLOUR OR MEAL. THESE FOODS ARE IMPORTANT SOURCES OF B VITAMINS AND IRON. THEY ALSO PROVIDE PROTIEN. WHOLE GRAINS CONTRIBUTE MAGNESIUM, FOLACIN AND FIBER IN ADDITION TO B VITAMINS AND IRON.  
 Track 2 READY TO EAT BREAKFAST CEREALS ARE FOR THE MOST PART FORTIFIED AT NUTRIENT LEVELS WELL ABOVE WHAT IS NORMALLY FOUND IN WHOLE GRAINS. BUT, IF THE CEREAL HAS BEEN REFINED, IT MAY BE LOW IN OTHER VITAMINS AND TRACE ELEMENTS SO IT'S A GOOD IDEA TO INCLUDE SOME WHOLE GRAIN PRODUCTS IN YOUR DIET

AUDIO RUN TIME (SEC.)  (47)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

ONE SERVING = 1 SLICE BREAD  
 1/2 - 3/4 CUP COOKED CEREAL  
 CKD MACARONI  
 CKD NOODLES  
 CKD RICE  
 CKD SPAGHETTI

1 OZ. READY TO EAT CEREAL  
 (PICTURE OF THESE FOODS IN BACKGROUND)

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

|                |                           |                               |           |    |         |
|----------------|---------------------------|-------------------------------|-----------|----|---------|
| DIET<br>COURSE | DIET GUIDE<br>MODULE/FILE | VARIETY 2.1.3<br>INST'L. UNIT | VIDEODISC | TO | FRAME # |
|----------------|---------------------------|-------------------------------|-----------|----|---------|


| FUNCTION<br>KEY | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-----------------|-----------------------|---------------|-----------|
| NEXT            |                       | QUESTION      |           |
| BACK            |                       | INDEX PAGE    |           |
| CHOOSE          |                       | REMEDATION    |           |
| HELP            |                       | HELP PAGE     |           |
| REVIEW          |                       | REINFORCEMENT |           |
| ANSWERS         |                       | TESTING       |           |
|                 |                       | OBJECTIVE     |           |
|                 |                       | LESSON        |           |
|                 |                       | OTHER         |           |

| COMPUTER DISPLAY |
|------------------|
|                  |

©CIPD 1981

| AUDIO NARRATION   |
|---|
| <p>XX Track 1 THE MILK AND CHEESE GROUP INCLUDES MILK IN ANY FORM. IT<br/>                     () Track 2 ALSO INCLUDES YOGURT, CHEESE AND ICE CREAM. THESE FOODS<br/>                     ARE IMPORTANT SOURCES OF CALCIUM AND RIBOFLAVIN. THEY<br/>                     ALSO CONTAIN PROTEIN, VITAMINS A, B6 AND B12. THEY ARE<br/>                     SOMETIMES FORTIFIED WITH VITAMIN D.</p> <p>RECOMMENDED SERVINGS FOR THE ADULT ARE 2 EACH DAY.<br/>                     PREGNANT WOMEN REQUIRE 3 SERVINGS PER DAY AND LACTATING<br/>                     WOMEN REQUIRE 4 SERVINGS PER DAY.</p> <p>AUDIO RUN TIME (SEC.) <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">36</span></p> |

| VIDEODISC DISPLAY   |
|---|
| <p>( ) MOTION <span style="float: right;">( ) CONCEPTUALLY LINKED TO</span></p> <p>(X) STILL <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) LOCATION <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) STUDIO <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) 16mm <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) 35mm <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) VIDEOTAPE <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) GRAPHIC <span style="float: right;"><input type="checkbox"/></span></p> <p>(X) VIDEOGRAPHIC <span style="float: right;"><input type="checkbox"/></span></p> <p>( ) OTHER <span style="float: right;"><input type="checkbox"/></span></p> <div style="border: 1px solid black; border-radius: 50%; padding: 20px; margin: 20px auto; width: 80%;"> <p>ONE SERVING = 1 CUP MILK</p> <p>OR</p> <p>TO GET THE AMOUNT OF CALCIUM EQUIVALENT TO<br/>                             1 CUP OF MILK:</p> <ul style="list-style-type: none"> <li>1 CUP YOGURT</li> <li>1 1/3 CUPS CHEDDAR OR SWISS CHEESE</li> <li>2 OZ PROCESSED CHEESE FOOD</li> <li>1 1/2 CUP ICE CREAM OR ICE MILK</li> <li>2 CUPS COTTAGE CHEESE</li> </ul> <p>(PICTURE OF THESE FOODS IN THE BACKGROUND)</p> </div> <p>VIDEO RUN TIME (SEC.) <span style="border: 1px solid black; border-radius: 50%; padding: 2px;"> </span></p> |

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  VARIETY 2.1.4 INST'L. UNIT  TO  VIDEODISC TO  FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| NEWS          |                    | QUESTION      |           |
| HELP          |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 THE FOODS IN THE NEXT GROUP ARE IMPORTANT SOURCES OF PROTEIN, PHOSPHORUS, VITAMINS B6 + B12 AND OTHER VITAMINS AND MINERALS. RED MEATS ARE GOOD SOURCES OF IRON AND ZINC. DRY BEANS + PEAS, SOYBEANS AND NUTS ARE GOOD SOURCES OF MAGNESIUM. CHOLESTEROL OCCURS NATURALLY IN FOODS OF ANIMAL ORIGIN. ORGAN MEATS AND EGG YOLKS HAVE THE HIGHEST CONCENTRATION OF CHOLESTEROL WHILE FISH AND SHELL FISH ARE RELATIVELY LOW. IT IS BEST TO EAT A VARIETY OF FOODS FROM THIS GROUP.

AUDIO RUN TIME (SEC.)  (42)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

SERVING SIZES:

ONE SERVING = 2-3 OUNCES LEAN COOKED MEAT, POULTRY OR FISH WITHOUT BONE.

COUNT AS ONE OUNCE OF MEAT:

ONE EGG  
 1/2 CUP COOKED DRY BEANS, DRY PEAS SOYBEANS OR LENTILS  
 2 TBSP PEANUT BUTTER  
 1/4 TO 1/2 CUP NUTS, SESAME SEEDS OR SUNFLOWER SEEDS

(PICTURE OF THESE FOODS IN BACKGROUND)

VIDEO RUN TIME (SEC.)

CIPD CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE   
  DIET GUIDE MODULE/FILE   
  VARIETY 2.1.5 INST'L. UNIT   
  TO  VIDEODISC   
  FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| MENU     |                    | QUESTION      |           |
| INDEX    |                    | INDEX PAGE    |           |
| CHIEF    |                    | REMEDIATION   |           |
| HELP     |                    | HELP PAGE     |           |
| ANSWERS  |                    | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

COMPUTER DISPLAY

THESE FOODS INCLUDE:

BUTTER  
 REFINED, UNENRICHED BREADS, PASTRIES, FLOUR PRODUCTS  
 SOFT DRINKS  
 HIGHLY SUGERED BEVERAGES  
 ALCOHOLIC BEVERAGES  
 MARGARINE  
 MAYONNAISE  
 SALAD DRESSINGS  
 CANDY  
 SUGAR  
 JAMS, JELLIES  
 SIRUPS, SWEET TOPPINGS

© CIPD 1981

AUDIO NARRATION

Track 1   
 FOODS IN THE FATS, SWEETS AND ALCOHOL GROUP ARE CALORIE DENSE. THIS MEANS THAT THEY PROVIDE MINIMAL AMOUNTS OF NUTRIENTS IN RELATION TO THE CALORIES THEY PROVIDE. IN GENERAL, THE AMOUNT OF THESE FOODS TO USE DEPENDS ON THE NUMBER OF CALORIES YOU REQUIRE. IT IS A GOOD IDEA TO CONCENTRATE FIRST ON THE NUTRIENT DENSE FOODS PROVIDED IN THE OTHER FOUR FOOD GROUPS.

Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

NO SERVING SIZES ARE DEFINED BECAUSE A BASIC NUMBER OF SERVINGS IS NOT SUGGESTED FOR THIS GROUP.

(BACKGROUND PICTURE OF FOODS IN THIS GROUP)

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.2.0 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| NEWS     |                    | QUESTION      |           |
| HELP     |                    | INDEX PAGE    |           |
| QUIZ     |                    | REMEDATION    |           |
| HELP     |                    | HELP PAGE     |           |
| HELP     |                    | REINFORCEMENT |           |
| HELP     |                    | TESTING       |           |
| HELP     |                    | OBJECTIVE     |           |
| HELP     |                    | LESSON        |           |
| HELP     |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

() CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

MAINTAIN IDEAL WEIGHT

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.2.0 INST'L. UNIT  VIDEODISC  TO  FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEXT         |                    | QUESTION      |           |
| BACK         |                    | INDEX PAGE    |           |
| SHIFT BACK   |                    | REMIEDIATION  |           |
| HELP         |                    | HELP PAGE     |           |
| AUTO-ADV.    |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 IN ORDER TO MAINTAIN IDEAL WEIGHT, YOU MUST TAKE IN ONLY  
 ( ) Track 2 AS MANY CALORIES AS YOU BURN. IF YOU TAKE IN MORE CALORIES THAN WHAT YOU NEED, YOUR BODY WILL STORE THE EXCESS AS FAT. THIS CAN LEAD TO OBESITY. NOT ONLY IS BEING OBESE UNATTRACTIVE, IT IS ASSOCIATED WITH HIGH BLOOD PRESSURE, ATHEROSCLEROSIS AND DIABETES. THESE IN TURN INCREASE THE RISK OF HEART ATTACK AND STROKE.

WHAT IS YOUR IDEAL WEIGHT? HERE IS A CHART OF ACCEPTABLE WEIGHT RANGES FOR HEIGHT AND SEX. IF YOU HAVE A SMALLER BONE STRUCTURE, A BETTER WEIGHT WOULD BE AT THE LOWER END OF THE RANGE. A PERSON WITH A LARGER BONE STRUCTURE MIGHT FIND THEIR IDEAL WEIGHT TO BE AT THE UPPER END OF THE RANGE FOR HEIGHT AND SEX. AUDIO RUN TIME (SEE ) (56)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION   
 (X) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 ( ) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

| SUGGESTED BODY WEIGHTS     |              |                |
|----------------------------|--------------|----------------|
| RANGE OF ACCEPTABLE WEIGHT |              |                |
| HEIGHT (FEET-INCHES)       | MEN (POUNDS) | WOMEN (POUNDS) |
| 4'10"                      |              | 92-119         |
| 4'11"                      |              | 94-122         |
| 5'0"                       |              | 96-125         |
| 5'1"                       |              | 99-128         |
| 5'2"                       | 112-141      | 102-131        |
| 5'3"                       | 115-144      | 105-134        |
| 5'4"                       | 118-148      | 108-138        |
| 5'5"                       | 121-152      | 111-142        |
| 5'6"                       | 124-156      | 114-146        |
| 5'7"                       | 128-161      | 118-150        |
| 5'8"                       | 132-166      | 122-154        |
| 5'9"                       | 136-170      | 126-158        |
| 5'10"                      | 140-174      | 130-162        |
| 5'11"                      | 144-179      | 134-168        |
| 6'0"                       | 148-184      | 138-173        |
| 6'1"                       | 152-189      |                |
| 6'2"                       | 156-194      |                |
| 6'3"                       | 160-199      |                |
| 6'4"                       | 164-204      |                |

NO LINK

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE    DIET GUIDE MODULE/FILE    2.2.1 INST'L. UNIT    [ ] VIDEODISC    TO    [ ] FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEXT         |                    | QUESTION      |           |
| PREV         |                    | INDEX PAGE    |           |
| SHIFT CALL   |                    | REMEDICATION  |           |
| HELP         |                    | HELP PAGE     |           |
| ANTHROP.     |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

A SAFE AMOUNT OF WEIGHT TO LOSE IS 1-2 POUNDS PER WEEK. YOU WILL BE MORE SUCCESSFUL AT MAINTAINING YOUR GOAL WEIGHT BY WORKING AT A GRADUAL WEIGHT LOSS.

© CIPD 1981

AUDIO NARRATION

( ) Track 1 TO LOSE WEIGHT, START BY CUTTING BACK ON FATS, SUGARS AND ALCOHOL IN YOUR DIET. ALSO, CUT DOWN ON THE AMOUNT OF FOOD THAT YOU EAT. IT IS NOT A WIDE IDEA TO ELIMINATE ANY ONE FOOD OR GROUP OF FOODS THAT ARE NUTRIENT DENSE. ANOTHER IMPORTANT ASPECT OF WEIGHT LOSS IS PHYSICAL ACTIVITY. IT IS EASY TO INCORPORATE PHYSICAL ACTIVITY INTO A BUSY SCHEDULE. BEGIN WITH WALKING TO SCHOOL OR WORK. TAKE THE STAIRS INSTEAD OF RIDING THE ELEVATOR. YOU'LL FIND IT MUCH EASIER TO LOSE THOSE EXCESS POUNDS WHEN YOU GET SOME KIND OF DAILY EXERCISE.

AUDIO RUN TIME (SEC.) (40)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

FILM OF A MAN REFUSING A RICH, HEAVY DESSERT.  
 FILM OF A WOMAN EATING SMALLER PORTIONS AT A MEAL  
 FILM OF A COUPLE WALKING TO SCHOOL  
 FILM OF A GIRL RIDING HER BICYCLE TO WORK  
 FILM OF TWO MEN PLAYING RAQUET BALL  
 FILM OF A GROUP OF YOUNG ADULTS RUNNING

VIDEO RUN TIME (SEC.) ( )


 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET TO DIET GUIDE 2.3 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>ID# | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-----------------|-----------------------|---------------|-----------|
| NEXT            |                       | QUESTION      |           |
| BACK            |                       | INDEX PAGE    |           |
| CHIEF MENU      |                       | REMEDIATION   |           |
| HELP            |                       | HELP PAGE     |           |
| ANTI-DRUG       |                       | REINFORCEMENT |           |
|                 |                       | TESTING       |           |
|                 |                       | OBJECTIVE     |           |
|                 |                       | LESSON        |           |
|                 |                       | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

AVOID TOO MUCH FAT  
AND CHOLESTEROL

VIDEO RUN TIME (SEC.)



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.3 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION FILE | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| NEWS          |                    | QUESTION      |           |
| ...           |                    | INDEX PAGE    |           |
| ...           |                    | REMEDIATION   |           |
| ...           |                    | HELP PAGE     |           |
| ...           |                    | REINFORCEMENT |           |
| ...           |                    | TESTING       |           |
| ...           |                    | OBJECTIVE     |           |
| ...           |                    | LESSON        |           |
| ...           |                    | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

( ) Track 1 IF YOU HAVE HIGH BLOOD CHOLESTEROL LEVELS YOU HAVE A GREATER CHANCE OF HAVING A HEART ATTACK. BLOOD CHOLESTEROL LEVELS DO VARY WITH INDIVIDUALS BUT POPULATIONS WITH HIGH CONSUMPTION RATES FOR FAT AND CHOLESTEROL TEND TO HAVE HIGHER LEVELS. WHILE IT IS STILL CONTROVERSIAL WHETHER TO RECOMMEND THAT INDIVIDUALS REDUCE THEIR INTAKE OF FAT AND CHOLESTEROL MANY SCIENTISTS BELIEVE IT IS SENSIBLE TO CONSUME ONLY MODERATE AMOUNTS OF THESE. IT IS ALSO A GOOD IDEA TO VARY THE TYPES OF FAT YOU EAT.

AUDIO RUN TIME (SEC.)  33

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

TO AVOID TOO MUCH FAT, SATURATED FAT, AND CHOLESTEROL

- CHOOSE LEAN MEAT, FISH, POULTRY, DRY BEANS AND PEAS AS YOUR PROTEIN SOURCES
- MODERATE YOUR USE OF EGGS AND ORGAN MEATS (SUCH AS LIVER)
- LIMIT YOUR INTAKE OF BUTTER, CREAM, HYDROGENATED MARGARINES, SHORTENINGS AND COCONUT OIL, AND FOODS MADE FROM SUCH PRODUCTS
- TRIM EXCESS FAT OFF MEATS
- BROIL, BAKE, OR BOIL RATHER THAN FRY
- READ LABELS CAREFULLY TO DETERMINE BOTH AMOUNT AND TYPES OF FAT CONTAINED IN FOODS

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FOR ION<br>FR | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|---------------|-----------------------|---------------|-----------|
| MEAL          |                       | QUESTION      |           |
| INDEX         |                       | INDEX PAGE    |           |
| INDEX PAGE    |                       | REMEDATION    |           |
| HELP          |                       | HELP PAGE     |           |
| REINFORCEMENT |                       | REINFORCEMENT |           |
| TESTING       |                       | TESTING       |           |
| OBJECTIVE     |                       | OBJECTIVE     |           |
| LESSON        |                       | LESSON        |           |
| OTHER         |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

AVOID TOO MUCH SUGAR

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE    DIET GUIDE MODULE/FILE    2.4 INST'L. UNIT    TO    VIDEODISC    FRAME #

| INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------------|---------------|-----------|
| INDEX PAGE         | QUESTION      |           |
| INDEX PAGE         | INDEX PAGE    |           |
| INDEX PAGE         | REMEDATION    |           |
| INDEX PAGE         | HELP PAGE     |           |
| INDEX PAGE         | REINFORCEMENT |           |
| INDEX PAGE         | TESTING       |           |
| INDEX PAGE         | OBJECTIVE     |           |
| INDEX PAGE         | LESSON        |           |
| INDEX PAGE         | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

( ) Track 1 THE MAJOR HEALTH HAZARD FROM EATING TOO MUCH SUGAR IS  
 ( ) Track 2 TOOTH DECAY. THE RISK INCREASES THE MORE FREQUENTLY YOU  
 EAT BETWEEN MEALS. FROM A NUTRITIONAL STANDPOINT,  
 SUGARS AND SWEETS PROVIDE MINIMAL AMOUNTS OF NUTRIENTS IN  
 RELATION TO THE CALORIES THEY PROVIDE. THIS IS IMPORTANT  
 TO REMEMBER, PARTICULARLY IF YOUR CALORIC REQUIREMENT IS LOW.

AUDIO RUN TIME (SEC.) (23)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

(X) MOTION   

( ) STILL   

( ) LOCATION   

( ) STUDIO   

( ) 16mm   

( ) 35mm   

( ) VIDEOTAPE   

(X) GRAPHIC   

( ) VIDEOGRAPHIC   

( ) OTHER   

PICTURE OF THESE FOODS IN BACKGROUND

TO AVOID EXCESSIVE SUGARS

- USE LESS OF ALL SUGARS, INCLUDING WHITE SUGAR, BROWN SUGAR, RAW SUGAR, HONEY, AND SYRUPS
- EAT LESS OF FOODS CONTAINING THESE SUGARS, SUCH AS CANDY, SOFT DRINKS, ICE CREAM, CAKES, COOKIES
- SELECT FRESH FRUITS OR FRUITS CANNED WITHOUT SUGAR OR LIGHT SYRUP RATHER THAN HEAVY SYRUP
- READ FOOD LABELS FOR CLUES ON SUGAR CONTENT - IF THE NAMES SUCROSE, GLUCOSE, MALTOSE, DEXTROSE, LACTOSE, FRUCTOSE, OR SYRUPS APPEAR FIRST, THEN THERE IS A LARGE AMOUNT OF SUGAR
- REMEMBER, HOW OFTEN YOU EAT SUGAR IS AS IMPORTANT AS HOW MUCH SUGAR YOU EAT

VIDEO RUN TIME (SEC.) ( )

© CIPD 1981

CIPD CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET D    DIET GUIDE    2.5    TO      
 COURSE    MODULE/FILE    INST'L. UNIT    VIDEODISC    FRAME #

| FUNCTION REF. | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MEAT          |                    | QUESTION      |           |
| PROX          |                    | INDEX PAGE    |           |
| CHART 1       |                    | REMEDATION    |           |
| DIET          |                    | HELP PAGE     |           |
| DIETARY       |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

IF YOU DRINK ALCOHOL, DO SO IN  
 MODERATION

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.5 INST'L. UNIT  VIDEODISC TO  FRAME #

| FUNCTION REF. | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| HEAD          |                    | QUESTION      |           |
| HEAD          |                    | INDEX PAGE    |           |
| CHIEF OF      |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| DATA-APP.     |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

**COMPUTER DISPLAY**

DISPLAY THE DIETARY GUIDELINES AND FLASH THE "IF YOU DRINK ALCOHOL, DO SO IN MODERATION"

EAT A VARIETY OF FOODS  
 MAINTAIN IDEAL WEIGHT  
 AVOID TOO MUCH FAT AND CHOLESTEROL  
 AVOID TOO MUCH SUGAR  
 IF YOU DRINK ALCOHOL, DO SO IN MODERATION  
 EAT FOODS WITH ADEQUATE STARCH AND FIBER  
 AVOID TOO MUCH SALT AND SODIUM

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1 ALCOHOLIC BEVERAGES TEND TO BE HIGH IN CALORIES AND LOW IN  
 ( ) Track 2 OTHER NUTRIENTS. THEY ARE CONSIDERED TO BE CALORIE DENSE FOODS. IF YOU ARE TRYING TO MAINTAIN IDEAL WEIGHT YOU MAY WANT TO LIMIT YOUR CONSUMPTION OF THESE BEVERAGES.

HEAVY DRINKING CAN RESULT IN A NUMBER OF SERIOUS CONDITIONS, SUCH AS LIVER DISEASE AND SOME NEUROLOGICAL DISORDERS. VITAMIN AND MINERAL DEFICIENCIES MAY OCCUR IN HEAVY DRINKERS DUE TO POOR FOOD INTAKE AND BECAUSE OF ALTERED NUTRIENT ABSORPTION.

AUDIO RUN TIME (SEC.)  34


**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

BACKGROUND PICTURE OF ALCOHOLIC BEVERAGES

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>REF. | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|------------------|-----------------------|---------------|-----------|
| MEMO             |                       | QUESTION      |           |
| FILE             |                       | INDEX PAGE    |           |
| SHIFT KEY        |                       | REMEDIATION   |           |
| HELP             |                       | HELP PAGE     |           |
| PROLOGUE         |                       | REINFORCEMENT |           |
|                  |                       | TESTING       |           |
|                  |                       | OBJECTIVE     |           |
|                  |                       | LESSON        |           |
|                  |                       | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

AVOID TOO MUCH SODIUM AND SALT

VIDEO RUN TIME (SEC.)



VIDEOCD/MICROCOMPUTER PLANNING SHEET

DIET COURSE:  DIET GUIDE MODULE/FILE:  2.6 INST'L. UNIT:  VIDEOCD:  TO  FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | * TYPE        | CONDITION |
|-----------|--------------------|---------------|-----------|
| MENU      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| REMEDIAL  |                    | REMEDIAL      |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

**COMPUTER DISPLAY**

DISPLAY THE DIETARY GUIDELINES AND FLASH "AVOID TOO MUCH SALT AND SODIUM"

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1 THE MAJOR HAZARD OF EXCESSIVE SODIUM INTAKE IS FOR PERSONS WHO HAVE HIGH BLOOD PRESSURE. SODIUM INTAKE IS BUT ONE OF THE FACTORS KNOWN TO AFFECT BLOOD PRESSURE. OBESITY IN PARTICULAR, SEEMS TO PLAY A MAJOR ROLE. BUT, IN POPULATIONS WITH LOW-SODIUM INTAKES, HIGH BLOOD PRESSURE IS RARE. IN CONTRAST, POPULATIONS WITH HIGH-SODIUM INTAKES, HIGH BLOOD PRESSURE IS COMMON.

SINCE MOST AMERICANS EAT MORE SODIUM THAN IS NEEDED, CONSIDER REDUCING YOUR SODIUM INTAKE.

AUDIO RUN TIME (SEC.)  36

**VIDEOCD DISPLAY**


( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

**TO AVOID TOO MUCH SODIUM:**

- LEARN TO ENJOY THE UNSALTED FLAVORS OF FOODS
- COOK WITH ONLY SMALL AMOUNTS OF ADDED SALT
- ADD LITTLE OR NO SALT TO FOOD AT THE TABLE
- LIMIT YOUR INTAKE OF SALTY FOODS, SUCH AS POTATO CHIPS, PRETZELS, SALTED NUTS AND POPCORN, CONDIMENTS (SOY SAUCE, STEAK SAUCE, GARLIC SALT), CHEESE, PICKLED FOODS, CURED MEATS
- READ FOOD LABELS CAREFULLY TO DETERMINE THE AMOUNTS OF SODIUM IN PROCESSED FOODS

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.7 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION<br>ID | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|----------------|-----------------------|---------------|-----------|
| NEXT           |                       | QUESTION      |           |
| BACK           |                       | INDEX PAGE    |           |
| CHIT CHAT      |                       | REMEDIATION   |           |
| HELP           |                       | HELP PAGE     |           |
| REINFORCE      |                       | REINFORCEMENT |           |
|                |                       | TESTING       |           |
|                |                       | OBJECTIVE     |           |
|                |                       | LESSON        |           |
|                |                       | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

EAT FOODS WITH ADEQUATE STARCH AND FIBER

NO LINK

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDANCE MODULE/FILE  VARIETY2.7 INST'L. UNIT  TO  VIDEODISC TO  FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MEAT      |                    | QUESTION      |           |
| PROG      |                    | INDEX PAGE    |           |
| DRIFT     |                    | REMEDATION    |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORC  |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

**COMPUTER DISPLAY**

DISPLAY THE DIETARY GUIDELINES AND FLASH "EAT FOODS WITH ADEQUATE STARCH AND FIBER."

©CIPD 1981

**AUDIO NARRATION**

( ) Track 1 INCREASING YOUR CONSUMPTION OF CERTAIN COMPLEX CARBOHYDRATES CAN ALSO HELP INCREASE DIETARY FIBER. THE AVERAGE AMERICAN DIET IS RELATIVELY LOW IN FIBER.  
 EATING MORE FOODS HIGH IN FIBER TENDS TO REDUCE THE SYMPTOMS OF CHRONIC CONSTIPATION, DIVERTICULOSIS, AND SOME TYPES OF "IRRITABLE BOWEL." THERE IS ALSO CONCERN THAT LOW FIBER DIETS MIGHT INCREASE THE RISK OF DEVELOPING CANCER OF THE COLON, BUT WHETHER THIS IS TRUE IS NOT YET KNOWN.  
 TO MAKE SURE YOU GET ENOUGH FIBER IN YOUR DIET, YOU SHOULD EAT FRUITS AND VEGETABLES, WHOLE GRAIN BREADS AND CEREALS. THERE IS NO REASON TO ADD FIBER TO FOODS THAT DO NOT ALREADY CONTAIN IT.

AUDIO RUN TIME  44

**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

TO EAT MORE COMPLEX CARBOHYDRATES DAILY  
 SUBSTITUTE STARCHES FOR FATS AND SUGARS  
 SELECT FOODS WHICH ARE GOOD SOURCES OF FIBER AND STARCH, SUCH AS WHOLE GRAIN BREADS AND CEREALS, FRUITS AND VEGETABLES, BEANS, PEAS, AND NUTS.

(PICTURE OF FOODS HIGH IN STARCH AND FIBER IN BACKGROUND)

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.7.1 INST'L. UNIT  VIDEODISC  TO  FRAME #

| FUNCTION<br>KEY | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-----------------|-----------------------|---------------|-----------|
| NEW             |                       | QUESTION      |           |
| STOP            |                       | INDEX PAGE    |           |
| SHIFT           |                       | REMEDATION    |           |
| HELP            |                       | HELP PAGE     |           |
| REPEAT          |                       | REINFORCEMENT |           |
|                 |                       | TESTING       |           |
|                 |                       | OBJECTIVE     |           |
|                 |                       | LESSON        |           |
|                 |                       | OTHER         |           |

COMPUTER DISPLAY

WHICH FOOD GROUPS INCLUDE FOODS THAT ARE GOOD SOURCES OF STARCH AND FIBER?

A) MILK AND CHEESE GROUP

B) BREAD AND CEREAL GROUP

C) MEAT, POULTRY, FISH AND BEANS GROUP

D) FATS, SWEETS AND ALCOHOL GROUP

©CIPD 1981

AUDIO NARRATION

( ) Track 1

( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION

( ) STILL

( ) LOCATION

( ) STUDIO

( ) 16mm

( ) 35mm

( ) VIDEOTAPE


( ) GRAPHIC

VIDEOGRAPHIC

( ) OTHER

QUIZ

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  DIET GUIDE MODULE/FILE  2.8 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION   | INSTRUCTIONAL UNIT   | TYPE                     | CONDITION |
|------------|--|--------------------------|-----------|
| NEXT       | REINFORCEMENT OR<br>RECALL QUIZ OF ALL<br>DIETARY GUIDELINES | QUESTION                 |           |
| BACK       |  | INDEX PAGE               |           |
| SHIFT LEFT |  | REMEDIATION              |           |
| HELP       |  | HELP PAGE                |           |
| SHIFTRIGHT |  | REINFORCEMENT<br>TESTING |           |
|            |  | OBJECTIVE                |           |
|            |  | LESSON                   |           |
|            |  | OTHER                    |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2


AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 ( ) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

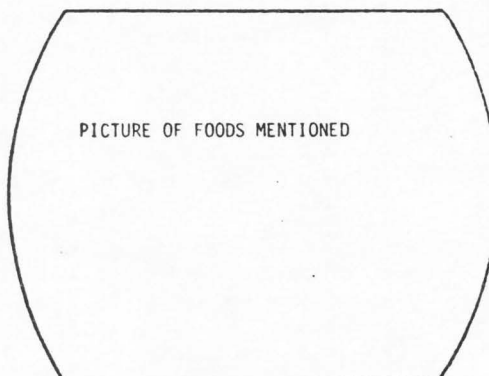
DIET  INQ  3.1  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MENU      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| CHIEF     |                    | REMEDIATION   |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

AT 2.1

| COMPUTER DISPLAY  |
|---|
| (TO BE PRINTED AS MENTIONED BY NARRATOR):                                 |
| FRUITS<br>VEGETABLES<br>CEREALS<br>GRAINS<br>LEAN MEATS<br>DAIRY PRODUCTS |

| AUDIO NARRATION  |
|--|
| ( ) Track 1 SOME FOODS CONTAIN SUBSTANTIAL AMOUNTS OF VARIOUS NUTRIENTS<br>( ) Track 2 IN RELATIONSHIP TO THEIR CALORIC CONTENT. THESE FOODS ARE<br>CALLED NUTRIENT DENSE FOODS AND INCLUDE: FRUITS, VEGETABLES,<br>CEREAL, GRAINS, LEAN MEATS AND DAIRY PRODUCTS. |
| AUDIO RUN TIME (SEC.) <input type="text"/> (20)  |

| VIDEODISC DISPLAY  |   |
|--|---|
| ( ) MOTION<br>( ) STILL<br>( ) LOCATION<br>( ) STUDIO<br>( ) 16mm<br>( ) 35mm<br>( ) VIDEOTAPE<br>( ) GRAPHIC<br>( ) VIDEOGRAPHIC<br>( ) OTHER | ( ) CONCEPTUALLY LINKED TO<br><input type="checkbox"/><br><input type="checkbox"/><br>NO LINK |
|  <p>PICTURE OF FOODS MENTIONED</p>                         |   |
| VIDEO RUN TIME (SEC.) <input type="text"/>   |   |



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.1.1  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| NEXT     |                    | QUESTION      |           |
| BACK     |                    | INDEX PAGE    |           |
| EXIT     |                    | REMEDIATION   |           |
| HELP     |                    | HELP PAGE     |           |
| REVIEW   |                    | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

**COMPUTER DISPLAY**

(TO BE PRINTED AS MENTIONED BY NARRATOR):

FATS  
 SWEETS  
 ALCOHOL  
 REFINED, UNENRICHED BREADS, PASTRIES AND FLOUR PRODUCTS

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1 IN CONTRAST, CALORIE DENSE FOODS ARE FOODS WHICH PROVIDE  
 ( ) Track 2 MINIMAL AMOUNTS OF NUTRIENTS IN RELATION TO THEIR CALORIE CONTENT. THESE INCLUDE: FATS, SWEETS, ALCOHOL AND REFINED, UNENRICHED BREADS, PASTRIES AND FLOUR PRODUCTS.

AUDIO RUN TIME (SEC.)


**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF CALORIE DENSE FOODS

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INO  3.1.2  TO  VIDEODISC FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT                    | TYPE          | CONDITION |
|--------------|---------------------------------------|---------------|-----------|
| NEXT         | IF INCORRECT GO TO . IF OK GO TO NEXT | QUESTION      |           |
| BACK         |                                       | INDEX PAGE    |           |
| SHIFT/ON     |                                       | REMEDATION    |           |
| HELP         |                                       | HELP PAGE     |           |
| STOP/END     |                                       | REINFORCEMENT |           |
|              |                                       | TESTING       |           |
|              |                                       | OBJECTIVE     |           |
|              |                                       | LESSON        |           |
|              |                                       | OTHER         |           |

**COMPUTER DISPLAY**

BASED ON WHAT YOU HAVE LEARNED ABOUT THE BASIC FOOD GROUPS, WHICH GROUP(S) WOULD BE CONSIDERED CALORIE DENSE?

A) MILK AND CHEESE GROUP  
 B) FATS, SWEETS AND ALCOHOL GROUP  
 C) MEAT, POULTRY, FISH AND BEANS GROUP  
 D) BREAD AND CEREAL GROUP

SELECT THE CALORIE DENSE GROUP (S) BY PRESSING THE APPROPRIATE KEY.

© CIPD 1981

**AUDIO NARRATION**

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

**VIDEODISC DISPLAY**

CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

A B

C D

(PICTURE OF FOOD GROUPS)

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.2 3.3  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>ID# | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-----------------|-----------------------|---------------|-----------|
| MEAL            |                       | QUESTION      |           |
| PROG            |                       | INDEX PAGE    |           |
| QUEST           |                       | REMEDIATION   |           |
| HELP            |                       | HELP PAGE     |           |
| REINFOR         |                       | REINFORCEMENT |           |
| TESTING         |                       | TESTING       |           |
| OBJECTIVE       |                       | OBJECTIVE     |           |
| LESSON          |                       | LESSON        |           |
| OTHER           |                       | OTHER         |           |

**COMPUTER DISPLAY**

THE INDEX OF NUTRITIONAL QUALITY (INQ) IS A TOOL WHICH ENABLES US TO QUALITATEIVELY EVALUATE THE NUTRITIONAL CHARACTERISTICS OF AN INDIVIDUAL FOOD, A MEAL OR, FOOD INTAKE FOR AN ENTIRE DAY.

IT WILL GIVE YOU A MORE PRECISE IDEA AS TO WHETHER YOUR FOOD SELECTIONS ARE NUTRIENT DENSE OR CALORIE DENSE. IT WILL ALSO SHOW YOU IF YOUR FOOD SELECTIONS CONTAIN TOO MUCH FAT, CHOLESTEROL, SUGAR AND SODIUM.

PRESS SPACEBAR TO CONTINUE

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)


**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

INQ LOGO

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.4 INST'L. UNIT  TO  FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| NEWS      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| DRIFT     |                    | REMEDATION    |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORC. |                    | REINFORCEMENT |           |
|           |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 LET'S LOOK AT THE BASIC FOOD GROUPS USING INQ.  
 ( ) Track 2 (AFTER A FEW SECONDS) AS YOU CAN SEE, THE NUTRIENT PROFILE OF THE VEGETABLE AND FRUIT GROUP SHOWS THAT THESE FOODS ARE GENERALLY GOOD SOURCES OF VITAMIN A AND C, AND FOLACIN.

AUDIO RUN TIME (SEC.)  19


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 (x) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

NUTRIENT PROFILE OF THE VEGETABLE AND FRUIT GROUP IN COLOR GRAPHIC.

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.4.1 INST'L. UNIT  TO  VIDEODISC  FRAME #

| FUNCTION REF. | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MEAS          |                    | QUESTION      |           |
| REF           |                    | INDEX PAGE    |           |
| CHART         |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| INTERACT      |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 (AFTER - SECONDS): \*  
 ( ) Track 2

THE NUTRIENT PROFILE ON THE BREAD AND CEREAL GROUP SHOWS THAT THESE FOODS ARE GENERALLY GOOD SOURCES OF VITAMIN B6, ZINC AND IORN. THEY ALSO PROVIDE PROTEIN.

AUDIO RUN TIME (SEC.)  (12)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 (X) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

SHOW NUTRIENT PROFILE OF BREAD AND CEREAL GROUP IN COLOR GRAPHICS

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.4.2  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| INDEX PAGE    |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

©CIPD 1981

AUDIO NARRATION

( ) Track 1 (AFTER - SECONDS)  
 ( ) Track 2

THE NUTRIENT PROFILE OF THE MILK AND DAIRY GROUP SHOWS THAT THESE FOODS TEND TO BE GOOD SOURCES OF CALCIUM AND PROTEIN

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- (X) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

SHOW NUTRIENT PROFILE OF MILK AND CHEESE GROUP IN COLOR GRAPHICS

NO LINK

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.4.3  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>ID | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|----------------|-----------------------|---------------|-----------|
| MEAT           |                       | QUESTION      |           |
| PROT           |                       | INDEX PAGE    |           |
| DIET PLAN      |                       | REMEDIATION   |           |
| HELP           |                       | HELP PAGE     |           |
| REINFORC.      |                       | REINFORCEMENT |           |
| TESTING        |                       | TESTING       |           |
| OBJECTIVE      |                       | OBJECTIVE     |           |
| LESSON         |                       | LESSON        |           |
| OTHER          |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 (AFTER - SECONDS):  
 Track 2

THE NUTRIENT PROFILE OF THE MEAT GROUP SHOWS  
 THAT THIS GROUP PROVIDES SUBSTANTIAL AMOUNTS OF  
 PROTEIN, IRON, ZINC & VITAMIN B6.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

SHOW NUTRIENT PROFILE OF  
 MEAT GROUP IN COLOR GRAPHICS

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.4.4 INST'L. UNIT  TO  FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| NEWS      |                    | QUESTION      |           |
| HELP      |                    | INDEX PAGE    |           |
| EXERCISE  |                    | REMEDIATION   |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
|           |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

( ) Track 1  
( ) Track 2

(AFTER - SECONDS):

THE NUTRIENT PROFILE OF THE FATS, SWEETS AND ALCOHOL GROUP SHOWS THAT THESE FOODS PROVIDE PRIMARILY CALORIES.

AUDIO RUN TIME (SEC.)  8

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

NO LINK

SHOW NUTRIENT PROFILE OF FATS, SWEETS AND ALCOHOL GROUP IN COLOR GRAPHICS

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE      MODULE/FILE      INST'L. UNIT      VIDEODISC      FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| INDEX PAGE    |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AT UTAH STATE UNIVERSITY IN LOGAN, UTAH, DR. BONITA W. WYSE, PROFESSOR OF NUTRITION AND FOOD SCIENCES AND DR. R. GAURTH HANSEN, PROVOST AND DISTINGUISHED PROFESSOR OF NUTRITION AND FOOD SCIENCES HAVE DEVELOPED THE INDEX OF NUTRITIONAL QUALITY. LET'S LISTEN AS THEY DISCUSS THE CONCEPT OF NUTRIENT DILUTION.


AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

() CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

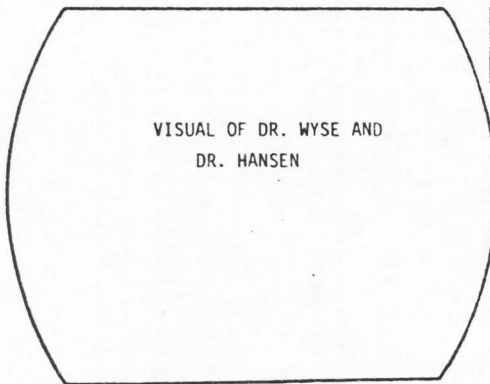
COURSE   
  MODULE/FILE   
  INST'L. UNIT   
  VIDEODISC   
 TO  FRAME #


| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEXT         |                    | QUESTION      |           |
| BACK         |                    | INDEX PAGE    |           |
| EXIT/QUIT    |                    | REMEDIATION   |           |
| HELP         |                    | HELP PAGE     |           |
| REINFORCE    |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

| COMPUTER DISPLAY          |
|---------------------------|
| NUTRIENT DILUTION CONCEPT |

©CIPD 1981

| AUDIO NARRATION   |
|---|
| <input checked="" type="checkbox"/> Track 1<br><input type="checkbox"/> Track 2<br><p style="text-align: center;">DISCUSSION OF NUTRIENT DILUTION BY<br/>DR. WYSE AND DR. HANSEN</p> <p style="text-align: right;">AUDIO RUN TIME (SEC.) <input type="text" value="5"/></p> |

| VIDEODISC DISPLAY  |
|--|
| <input checked="" type="checkbox"/> MOTION<br><input type="checkbox"/> STILL<br><input type="checkbox"/> LOCATION<br><input type="checkbox"/> STUDIO<br><input type="checkbox"/> 16mm<br><input type="checkbox"/> 35mm<br><input type="checkbox"/> VIDEOTAPE<br><input type="checkbox"/> GRAPHIC<br><input type="checkbox"/> VIDEOGRAPHIC<br><input type="checkbox"/> OTHER <div style="float: right; margin-top: 10px;"> <input type="checkbox"/> CONCEPTUALLY LINKED TO<br/> <input type="checkbox"/><br/> <input type="checkbox"/> </div> <div style="text-align: center; margin: 20px 0;">  <p style="text-align: center;">VISUAL OF DR. WYSE AND<br/>DR. HANSEN</p> </div> <p style="text-align: right;">VIDEO RUN TIME (SEC.) <input type="text"/></p> |


 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ 3.4.6 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| NEWS      |                    | QUESTION      |           |
| VIDEO     |                    | INDEX PAGE    |           |
| SCRIPT    |                    | REMEDIATION   |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORC. |                    | REINFORCEMENT |           |
|           |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

COMPUTER DISPLAY

LET'S LOOK AT SPECIFIC FOODS IN EACH FOOD GROUP TO SEE WHAT THEIR INDIVIDUAL NUTRIENT COMPOSITION IS

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

WHILE THE FOOD GROUPS AS A WHOLE GENERALLY CONTRIBUTE CERTAIN NUTRIENTS, SPECIFIC FOODS WITHIN EACH GROUP MAY OR MAY NOT CONTAIN THE SAME LEVELS OF THESE NUTRIENTS

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEO DISC/MICROCOMPUTER PLANNING SHEET

COURSE  MODULE/FILE  INST'L. UNIT  VIDEO DISC  TO  FRAME #

| FUNCTION<br>UNIT | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|------------------|-----------------------|---------------|-----------|
| MEAT             |                       | QUESTION      |           |
| PIZZA            |                       | INDEX PAGE    |           |
| CHIFFON          |                       | REMEDATION    |           |
| MILK             |                       | HELP PAGE     |           |
| SPAGHETTI        |                       | REINFORCEMENT |           |
|                  |                       | TESTING       |           |
|                  |                       | OBJECTIVE     |           |
|                  |                       | LESSON        |           |
|                  |                       | OTHER         |           |

**COMPUTER DISPLAY**

A. CHOCOLATE MILK  
 B. NONFAT MILK  
 C. SWISS CHEESE  
 D. CARTON OF YOGURT (WHOLE, W/FRUIT)

**AUDIO NARRATION**

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

**VIDEO DISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF CHOCOLATE MILK      PICTURE OF NONFAT MILK

PICTURE OF SWISS CHEESE      PICTURE OF CARTON OF YOGURT

VIDEO RUN TIME (SEC.)



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.5.1 INST'L. UNIT  TO  VIDEODISC  FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF  
CHOCOLATE MILK

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
( ) STILL  
( ) LOCATION  
( ) STUDIO  
( ) 16mm  
( ) 35mm  
( ) VIDEOTAPE  
( ) GRAPHIC  
( ) VIDEOGRAPHIC  
( ) OTHER

PICTURE OF CHOCOLATE MILK

VIDEO RUN TIME (SEC.)


**CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT**

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.5.2 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION # | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|------------|--------------------|---------------|-----------|
| MEAT       |                    | QUESTION      |           |
| ...        |                    | INDEX PAGE    |           |
| ...        |                    | REMEDIATION   |           |
| ...        |                    | HELP PAGE     |           |
| ...        |                    | REINFORCEMENT |           |
| ...        |                    | TESTING       |           |
| ...        |                    | OBJECTIVE     |           |
| ...        |                    | LESSON        |           |
| ...        |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF NONFAT MILK

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF NONFAT MILK

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.5.3 INST'L. UNIT  TO  VIDEODISC  FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| MENU         |                    | QUESTION      |           |
| BACK         |                    | INDEX PAGE    |           |
| CHIEF CL.    |                    | REMEDIATION   |           |
| HELP         |                    | HELP PAGE     |           |
| ADV. PAGE    |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF SWISS CHEESE

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
( ) STILL  
( ) LOCATION  
( ) STUDIO  
( ) 16mm  
( ) 35mm  
( ) VIDEOTAPE  
( ) GRAPHIC  
( ) VIDEOGRAPHIC  
( ) OTHER

PICTURE OF SWISS CHEESE

VIDEO RUN TIME (SEC.)


**CIPD** CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  3.5.4 INST'L. UNIT  VIDEODISC  TO  FRAME #

| FUNCTION<br>• SET | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-------------------|-----------------------|---------------|-----------|
| NEWS              |                       | QUESTION      |           |
| HELP              |                       | INDEX PAGE    |           |
| OBJECTIVE         |                       | REMEDIATION   |           |
| HELP              |                       | HELP PAGE     |           |
| REINFORCEMENT     |                       | REINFORCEMENT |           |
| TESTING           |                       | TESTING       |           |
| OBJECTIVE         |                       | OBJECTIVE     |           |
| LESSON            |                       | LESSON        |           |
| OTHER             |                       | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF YOGURT (WHOLE) WITH FRUIT

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
( ) STILL  
( ) LOCATION  
( ) STUDIO  
( ) 16mm  
( ) 35mm  
( ) VIDEOTAPE  
( ) GRAPHIC  
( ) VIDEOGRAPHIC  
( ) OTHER

PICTURE OF YOGURT WITH FRUIT

VIDEO RUN TIME (SEC.)


**CIPD**  
 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.6  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| INDEX    |                    | QUESTION      |           |
| INDEX    | if a) go to 3.6.1  | INDEX PAGE    |           |
| INDEX    | if b) go to 3.6.2  | REMEDIATION   |           |
| INDEX    | if c) go to 3.6.3  | HELP PAGE     |           |
| INDEX    | if d) go to 3.6.4  | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

COMPUTER DISPLAY

a) TURKEY, LIGHT AND DARK MEAT  
 b) HAMBURGER PATTY, REGULAR COOKED  
 c) FRANKFURTER - BEEF/PORK  
 d) FISH STICKS

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

MOTION  CONCEPTUALLY LINKED TO  
 STILL   
 LOCATION   
 STUDIO   
 16mm   
 35mm   
 VIDEOTAPE   
 GRAPHIC   
 VIDEOGRAPHIC   
 OTHER

A B

PICTURE OF TURKEY PICTURE OF HAMBURGER

C D

PICTURE OF FRANKFURTER PICTURE OF FISH STICKS

VIDEO RUN TIME (SEC.)



CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ 3.6.1 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MEAT          |                    | QUESTION      |           |
| INDEX PAGE    |                    | INDEX PAGE    |           |
| REMEDIATION   |                    | REMEDIATION   |           |
| HELP PAGE     |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF TURKEY, LIGHT AND DARK MEAT

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.) ○

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF TURKEY MEAT

VIDEO RUN TIME (SEC.) ○



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.6.2  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| NEWS          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| DIAGNOSIS     |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF HAMBURGER PATTY, COOKED

©CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

MOTION  CONCEPTUALLY LINKED TO

STILL

LOCATION

STUDIO

16mm

35mm

VIDEOTAPE


GRAPHIC

VIDEOGRAPHIC

OTHER

PICTURE OF HAMBURGER PATTY, COOKED

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| NEWS          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF BEEF/PORK FRANKFURTER

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF BEEF/PORK FRANKFURTER

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEO/ISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.7  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEO/ISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| DESCRIPTION   |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

A) WHOLE WHEAT BREAD  
 B) WAFFLE  
 C) OATMEAL  
 D) RICE, LONG GRAIN - WHITE

©CIPD 1981

AUDIO HARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER


A B

PICTURE OF WHOLE WHEAT BREAD PICTURE OF WAFFLE

C D

PICTURE OF BOWL OF OATMEAL PICTURE OF COOKED WHITE RICE

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.7.1  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEWS         |                    | QUESTION      |           |
| HELP         |                    | INDEX PAGE    |           |
| OBJECTIVE    |                    | REMEDIATION   |           |
| HELP         |                    | HELP PAGE     |           |
| VIDEO        |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF WHOLE WHEAT BREAD, ONE SLICE

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

( ) CONCEPTUALLY LINKED TO

PICTURE OF A SLICE OF WHOLE  
WHEAT BREAD

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION   | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|------------|--------------------|---------------|-----------|
| MENU       |                    | QUESTION      |           |
| INDEX      |                    | INDEX PAGE    |           |
| CHIEF MENU |                    | REMEDIATION   |           |
| HELP       |                    | HELP PAGE     |           |
| PROGRESS   |                    | REINFORCEMENT |           |
|            |                    | TESTING       |           |
|            |                    | OBJECTIVE     |           |
|            |                    | LESSON        |           |
|            |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF A WAFFLE

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

CONCEPTUALLY LINKED TO  
  
  
 NO LINE

PICTURE OF A WAFFLE

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| MENU     |                    | QUESTION      |           |
|          |                    | INDEX PAGE    |           |
|          |                    | REMEDIATION   |           |
|          |                    | HELP PAGE     |           |
|          |                    | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF OATMEAL, COOKED

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

() CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF A BOWL OF COOKED OATMEAL

VIDEO RUN TIME (SEC.)



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  INQ MODULE/FILE  374 INST'L. UNIT  VIDEODISC  TO  FRAME #

| FRONT PANEL   | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MEAT          |                    | QUESTION      |           |
| PROD          |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
|               |                    | TESTING       |           |
|               |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF RICE, LONG GRAIN - WHITE

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) MOTION  
 STILL  
( ) LOCATION  
( ) STUDIO  
( ) 16mm  
( ) 35mm  
( ) VIDEOTAPE  
( ) GRAPHIC  
( ) VIDEOGRAPHIC  
( ) OTHER

( ) CONCEPTUALLY LINKED TO

NO LINK

PICTURE OF COOKED WHITE RICE

VIDEO RUN TIME (SEC.)

© CIPD 1981

**CIPD** CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEO/COMPUTER PLANNING SHEET

TO 
  
 COURSE MODULE/FILE INST'L. UNIT VIDEO/COMPUTER FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          | IF A) GO TO 3.8.1  | QUESTION      |           |
| INDEX         | IF B) GO TO 3.8.2  | INDEX PAGE    |           |
| DRIFT         | IF C) GO TO 3.8.3  | REMEDIATION   |           |
| HELP          | IF D) GO TO 3.8.4  | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

**COMPUTER DISPLAY**

A) ORANGE  
 B) BROCCOLI  
 C) BANANA  
 D) FRENCH FRIES

**AUDIO NARRATION**

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

**VIDEO/COMPUTER DISPLAY**

( ) MOTION  
 (X) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

( ) CONCEPTUALLY LINKED TO


NO LINK

A) ORANGE                      B) BROCCOLI

C) BANANA                      D) FRENCH FRIES

VIDEO RUN TIME (SEC.)

© CIPD 1981


**CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT**

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO    
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| NEWS     |                    | QUESTION      |           |
| ...      |                    | INDEX PAGE    |           |
| ...      |                    | REMEDIATION   |           |
| ...      |                    | HELP PAGE     |           |
| ...      |                    | REINFORCEMENT |           |
| ...      |                    | TESTING       |           |
| ...      |                    | OBJECTIVE     |           |
| ...      |                    | LESSON        |           |
| ...      |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF AN ORANGE

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF AN ORANGE

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ 3.8.2 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| NEWS      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| REMEDIAL  |                    | REMEDIAL      |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF BROCCOLI

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.) ○

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDOGRAPHIC  
 ( ) OTHER

PICTURE OF BROCCOLI

VIDEO RUN TIME (SEC.) ○



CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ [ ] TO [ ]  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| TESTING       |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| OBJECTIVE     |                    | TESTING       |           |
| LESSON        |                    | OBJECTIVE     |           |
| OTHER         |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF A BANANA

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.) [ ]


VIDEODISC DISPLAY

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

( ) CONCEPTUALLY LINKED TO [ ]  
 [ ]  
 [ ]  
 NO LINK

PICTURE OF A BANANAN

VIDEO RUN TIME (SEC.) [ ]

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEO DISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEO DISC FRAME #

| INSTR. UNIT | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-------------|--------------------|---------------|-----------|
| MEAT        |                    | QUESTION      |           |
| ...         |                    | INDEX PAGE    |           |
| ...         |                    | REMEDIATION   |           |
| ...         |                    | HELP PAGE     |           |
| ...         |                    | REINFORCEMENT |           |
| ...         |                    | TESTING       |           |
| ...         |                    | OBJECTIVE     |           |
| ...         |                    | LESSON        |           |
| ...         |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF FRENCH FRIES

AUDIO NARRATION

Track 1  
 Track 2

AUDIO RUN TIME (SEC.)

VIDEO DISC DISPLAY

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF FRENCH FRIES

VIDEO RUN TIME (SEC.)



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INO  3.9  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| QUESTION      | IF A) GO TO 3.9.1  | QUESTION      |           |
| INDEX PAGE    | IF B) GO TO 3.9.2  | INDEX PAGE    |           |
| REMEDIATION   | IF C) GO TO 3.9.3  | REMEDIATION   |           |
| HELP PAGE     | IF D) GO TO 3.9.4  | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

**COMPUTER DISPLAY**

A) GELATIN DESSERT ( SWEETENED )  
 B) MILK CHOCOLATE BAR  
 C) SOFT DRINK  
 D) MARGARINE

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

**VIDEODISC DISPLAY**

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

( ) CONCEPTUALLY LINKED TO  
  
  
 NO LINK


A) PICTURE OF GELATIN DESSERT

B) PICTURE OF MILK CHOCOLATE BAR

C) PICTURE OF SOFT DRINK

D) PICTURE OF MARGARINE PAT

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.9.1  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MENU      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| REMEDIAL  |                    | REMEDICATION  |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF GELATIN DESSERT

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 ( ) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

PICTURE OF GELATIN DESSERT

VIDEO RUN TIME (SEC.)

© CIPD 1981

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  INQ  3.9.2  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| INDEX    |                    | QUESTION      |           |
| INDEX    |                    | INDEX PAGE    |           |
| INDEX    |                    | REMEDIATION   |           |
| INDEX    |                    | HELP PAGE     |           |
| INDEX    |                    | REINFORCEMENT |           |
| INDEX    |                    | TESTING       |           |
| INDEX    |                    | OBJECTIVE     |           |
| INDEX    |                    | LESSON        |           |
| INDEX    |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF MILK CHOCOLATE BAR

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF MILK CHOCOLATE BAR

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ 3.9.3 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| NEWS          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| REMEDIAL      |                    | REMEDIAL      |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF A SOFT DRINK

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

NO LINK

PICTURE OF A GLASS OF COLA

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET INQ 3.9.4 TO  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION SET | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| NEWS         |                    | QUESTION      |           |
| RTTY         |                    | INDEX PAGE    |           |
| DRIFT        |                    | REMEDIATION   |           |
| NEWS         |                    | HELP PAGE     |           |
| NEWS         |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

NUTRIENT PROFILE OF MARGARINE

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2

AUDIO RUN TIME (SEC.) ○

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF MARGARINE PAT

VIDEO RUN TIME (SEC.) ○

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDATION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| LESSON        |                    | OBJECTIVE     |           |
|               |                    | LESSON        |           |
|               |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

Narrator: Let's return to the classroom where Bob is about to dismiss his nutrition class.


AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

CONCEPTUALLY LINKED TO  
  
  
 NO LINK

VIDEO RUN TIME (SEC.)


**CIPD**  
 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  IND FOOD MODULE/FILE  410 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION<br>ID | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|----------------|-----------------------|---------------|-----------|
| NEWS           |                       | QUESTION      |           |
| REF            |                       | INDEX PAGE    |           |
| OBJECTIVE      |                       | REMEDIATION   |           |
| HELP           |                       | HELP PAGE     |           |
| REINFORC.      |                       | REINFORCEMENT |           |
| TESTING        |                       | TESTING       |           |
| OBJECTIVE      |                       | OBJECTIVE     |           |
| LESSON         |                       | LESSON        |           |
| OTHER          |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 BOB: THAT WILL BE ALL FOR TODAY CLASS. TOMORROW WE WILL DISCUSS THE ANATOMY AND PHYSIOLOGY OF THE GASTROINTESTINAL TRACT.

( ) Track 2

(NARRATOR TO SEC)

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

FADE IN....BOB SEEN DISMISSING THE CLASS. SEE BOB WALKING OUT OF THE CLASSROOM AFTER ERASING CHALKBOARD AND COLLECTING PAPERS.

NO LINK

VIDEO RUN TIME (SEC.)


**CIPD** CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| HELP         |                    | QUESTION      |           |
| INDEX        |                    | INDEX PAGE    |           |
| REMEDIAL     |                    | REMEDIATION   |           |
| HELP         |                    | HELP PAGE     |           |
| REINFORCE    |                    | REINFORCEMENT |           |
| TESTING      |                    | TESTING       |           |
| OBJECTIVE    |                    | OBJECTIVE     |           |
| LESSON       |                    | LESSON        |           |
| OTHER        |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 BOB: HELLO SUE!  
 Track 2 SUE: HI!  
 BOB: I'M READY FOR SOME BREAKFAST, HOW ABOUT YOU?  
 SUE: SOUNDS GOOD!  
 BOB: LET'S WALK OVER TO THE CAFETERIA AND GRAB A BITE.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

BOB WALKING OUT OF CLASS...SUE WAITING FOR BOB OUTSIDE OF CLASSROOM.

DISCUSSION BETWEEN SUE AND BOB BEGINS. FADE OUT AS THEY START WALKING OFF.

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  IND FOOD MODULE/FILE  4.1.1 INST'L. UNIT  TO  VIDEODISC FRAME #

| FUNCTION  | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MENU      |                    | QUESTION      |           |
| INDEX     |                    | INDEX PAGE    |           |
| REMEDIAL  |                    | REMEDICATION  |           |
| HELP      |                    | HELP PAGE     |           |
| REINFORCE |                    | REINFORCEMENT |           |
| TESTING   |                    | TESTING       |           |
| OBJECTIVE |                    | OBJECTIVE     |           |
| LESSON    |                    | LESSON        |           |
| OTHER     |                    | OTHER         |           |

COMPUTER DISPLAY

SHOW NUTRIENT PROFILE OF BREAKFAST

© CIPD 1981

AUDIO NARRATION

( ) Track 1 (AFTER PUTTING FOODS ON TRAY) SUE: BOB, I OVERHEARD YOUR LECTURE  
 ( ) Track 2 TODAY ON HOW TO IMPROVE THE DIET, IT REALLY CAUGHT MY INTEREST.  
 WHAT DO YOU THINK ABOUT THE FOODS I HAVE SELECTED FOR BREAKFAST?  
 BOB: WELL SUE, IF WE LOOKED AT THE NUTRIENT PROFILE OF THOSE FOODS WE WOULD  
 SEE THAT THEY ARE FAIRLY HIGH IN FAT AND CHOLESTEROL. THEY ARE ALSO  
 PROBABLY HIGH IN ADDED SUGAR. IT WOULD BE WISE FOR YOU TO MAKE SOME  
 CHANGES AT BREAKFAST SO THAT YOU WON'T BE LIMITED FOR THE REST OF YOUR  
 MEALS. ALSO, YOU SHOULD BE AWARE THAT YOU HAVEN'T INCLUDED A GOOD  
 VITAMIN C SOURCE WITH THIS MEAL. (AFTER BOB TALKS, NARRATOR SAYS:)  
 NARRATOR: BOB IS RIGHT. NOTE THE PROFILE ON FAT, CHOLESTEROL  
 AND SUGAR. YOU CAN ALSO SEE THAT VITAMIN C INTAKE IS ONLY 5%  
 OF THE STANDARD. AUDIO RUN TIME

VIDEODISC DISPLAY

( ) CONCEPTIONALLY LINKED TO

( ) MOTION   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 ( ) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

FADE IN...PICTURE OF BOB AND SUE  
 LOOKING AT FOOD GOING BY ON FOOD  
 CAROUSEL. SUE AND BOB MAKING SELECTIONS  
 AND PUTTING FOODS ON THEIR TRAYS.

NO LINK

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

COURSE   
  MODULE/FILE   
  INST'L. UNIT   
  VIDEODISC   
 TO  FRAME #

| TYPE          | INSTRUCTIONAL UNIT | TYPE | CONDITION |
|---------------|--------------------|------|-----------|
| QUESTION      |                    |      |           |
| INDEX PAGE    |                    |      |           |
| REMEDIATION   |                    |      |           |
| HELP PAGE     |                    |      |           |
| REINFORCEMENT |                    |      |           |
| TESTING       |                    |      |           |
| OBJECTIVE     |                    |      |           |
| LESSON        |                    |      |           |
| OTHER         |                    |      |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 SUE: I GUESS I DO NEED TO MAKE SOME CHANGES BOB. I LIKE ORANGE JUICE AND IT IS HIGH IN VITAMIN C. AS FOR THE FAT AND CHOLESTEROL I LIKE EGGS FOR BREAKFAST OCCASSIONALLY BUT I MUST ADMIT I AM GETTING A LITTLE TIRED OF EATING TWO EVERY MORNING. TODAY I WILL SKIP THE EGGS AND I WILL HAVE ONE PIECE OF BACON INSTEAD OF THREE. I CAN CUT THE BUTTER DOWN TO ONE PAT ON MY TOAST. I'LL ALSO SWITCH TO WHOLE WHEAT TOAST INSTEAD OF WHITE. GEE, DO YOU SUPPOSE THAT THE CHOCOLATE MILK COULD CONTAIN THAT MUCH SUGAR? BOB: IT IS VERY LIKELY. SUE: I'LL TRY JUST PLAIN 2% MILK... THAT SHOULD HELP DON'T YOU THINK? BOB: IT SOUNDS LIKE YOUR NEW SELECTIONS WILL ALLOW YOU MORE FREEDOM FOR FOODS SELECTIONS LATER ON IN THE DAY SUE.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

SUE MAKING NEW FOOD SELECTIONS AS BOB AND SUE CONVERSE.

VIDEO RUN TIME (SEC.)

CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET     IND FOOD     4.2.1     TO   
UNWISE    MOON E/FILE    INST'L. UNIT    VIDEODISC    FRAME #

| INSTR. UNIT | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-------------|--------------------|---------------|-----------|
| NEW         |                    | QUESTION      |           |
|             |                    | INDEX PAGE    |           |
|             |                    | REMEDIATION   |           |
|             |                    | HELP PAGE     |           |
|             |                    | REINFORCEMENT |           |
|             |                    | TESTING       |           |
|             |                    | OBJECTIVE     |           |
|             |                    | LESSON        |           |
|             |                    | OTHER         |           |

**COMPUTER DISPLAY**

SHOW NUTRIENT PROFILE OF NEW SELECTIONS AFTER BOB FINISHES SPEAKING AND BEFORE, NARRATOR

© CIPD 1981

**AUDIO NARRATION**


Track 1 NARRATOR: AS YOU CAN SEE, THE NUTRIENT PROFILE OF THIS  
 Track 2 MEAL LOOKS A LOT BETTER IN TERMS OF FAT, CHOLESTEROL,  
 AND SUGAR CONTENT. AND, IT WILL ALLOW SUE TO BE MORE  
 FLEXIBLE WITH HER FOOD CHOICES LATER ON IN THE AFTERNOON.

AUDIO RUN TIME (SEC.)

**VIDEODISC DISPLAY**

MOTION     CONCEPTUALLY LINKED TO  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VIDEO RUN TIME (SEC.)


**CIPD** CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

COURSE:  MODULE/FILE:  INST'L. UNIT:  VIDEODISC TO FRAME #

| TIME PERIOD | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-------------|--------------------|---------------|-----------|
| NEW         |                    | QUESTION      |           |
|             |                    | INDEX PAGE    |           |
|             |                    | REMEDIATION   |           |
|             |                    | HELP PAGE     |           |
|             |                    | REINFORCEMENT |           |
|             |                    | TESTING       |           |
|             |                    | OBJECTIVE     |           |
|             |                    | LESSON        |           |
|             |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 SUE: YOU HAVE REALLY BEEN A LOT OF HELP WITH MY BREAKFAST SELECTIONS, BOB. IT IS TOO BAD I CAN'T HAVE YOU AROUND TO HELP ME OUT AT SOME OF MY OTHER MEALS!

( ) Track 2 BOB: WHY DON'T WE MEET TODAY FOR LUNCH?  
SUE: THAT WOULD BE GREAT.  
BOB: WHY DON'T WE MEET AT THE HAMBURGER SHOP ON MAIN STREET AT NOON?  
SUE: I'LL SEE YOU THEN!

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

PICTURE OF BOB AND SUE SEATED,  
EATING THEIR BREAKFAST AND TALKING

FADE OUT AFTER BOB FINISHES TALKING

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO 
  
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| PROBLEM SET | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-------------|--------------------|---------------|-----------|
| MEAT        |                    | QUESTION      |           |
|             |                    | INDEX PAGE    |           |
|             |                    | REMEDIATION   |           |
|             |                    | HELP PAGE     |           |
|             |                    | REINFORCEMENT |           |
|             |                    | TESTING       |           |
|             |                    | OBJECTIVE     |           |
|             |                    | LESSON        |           |
|             |                    | OTHER         |           |

COMPUTER DISPLAY

USE VISUALS OF FOODS AND HAVE COMPUTER ASK QUESTIONS

AUDIO NARRATION

( ) Track 1  
( ) Track 2

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

( ) MOTION  
( ) STILL  
( ) LOCATION  
( ) STUDIO  
( ) 16mm  
( ) 35mm  
( ) VIDEOTAPE  
( ) GRAPHIC  
( ) VIDEOGRAPHIC  
( ) OTHER

QUIZ

VIDEO RUN TIME (SEC.)

© CIPD 1981


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| TYPE          | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| QUESTION      |                    | QUESTION      |           |
| INDEX PAGE    |                    | INDEX PAGE    |           |
| REMEDIATION   |                    | REMEDIATION   |           |
| HELP PAGE     |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

AUDIO NARRATION

Track 1 NARRATOR: LET'S CHECK IN WITH SUE AND BOB WHERE THEY  
 Track 2 ARE MEETING FOR THEIR LUNCHEON DATE AT THE  
 NEARBY FAST FOOD RESTAURANT.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

MOTION  CONCEPTUALLY LINKED TO  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VIDEO RUN TIME (SEC.)

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L UNIT VIDEODISC FRAME #

| PRE-TEST | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| NAME     |                    | QUESTION      |           |
|          |                    | INDEX PAGE    |           |
|          |                    | REMEDIATION   |           |
|          |                    | HELP PAGE     |           |
|          |                    | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 BOB: HI SUE. I SEE THAT YOU ARE READY TO GO IN AND BUY SOME LUNCH.

( ) Track 2 SUE: YES, I JUST GOT HERE. LET'S GO IN....I'M READY FOR LUNCH'.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

PICTURE OF SUE AND BOB WALKING INTO RESTAURANT.

VIDEO RUN TIME (SEC.)


**CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT**

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO 
  
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION KEY | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
| MENU         |                    | QUESTION      |           |
| INDEX        |                    | INDEX PAGE    |           |
| REPEAT       |                    | REMEDIATION   |           |
| HELP         |                    | HELP PAGE     |           |
| REINFORCE    |                    | REINFORCEMENT |           |
| TEST         |                    | TESTING       |           |
| OBJECTIVE    |                    | OBJECTIVE     |           |
| LESSON       |                    | LESSON        |           |
| OTHER        |                    | OTHER         |           |

COMPUTER DISPLAY

©CIPD 1981

AUDIO NARRATION

( ) Track 1 SUE: I'D LIKE A QUARTER POUNDHAMBURGER, A MILK SHAKE,  
 ( ) Track 2 AND SOME FRENCH FRIES. DO YOU THINK THAT I'D  
 BE ABLE TO STAY WITHIN MY NUTRIENT NEEDS WITH THIS MEAL?  
 BOB: WELL SUE, YOU WILL HAVE TO CONSIDER WHAT YOU ATE FOR  
 BREAKFAST AND WHAT YOU WILL BE EATING FOR DINNER.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

PICTURE OF SUE AT COUNTER LOOKING AT THE MENU ON THE WALL...TURNS TO BOB TO TALK.

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L UNIT VIDEODISC FRAME #

| PROBATION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|-----------|--------------------|---------------|-----------|
| MEAL      |                    | QUESTION      |           |
|           |                    | INDEX PAGE    |           |
|           |                    | REMEDIATION   |           |
|           |                    | HELP PAGE     |           |
|           |                    | REINFORCEMENT |           |
|           |                    | TESTING       |           |
|           |                    | OBJECTIVE     |           |
|           |                    | LESSON        |           |
|           |                    | OTHER         |           |

**COMPUTER DISPLAY**

SHOW NUTRIENT PROFILE OF QUARTER POUND HAMBURGER, MILK SHAKE AND FRENCH FRIES.

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1 BOB: YOU KNOW, THIS MEAL MIGHT BE A LITTLE MORE THAN WHAT  
 ( ) Track 2 YOU NEED IN TERMS OF PROTEIN AND CALORIES....THAT IS  
 IF YOU ARE EATING A REGULAR SIZE DINNER TONIGHT.  
 SUE: MY MOTHER IS HAVING A BIG MEAL TONIGHT...MAYBE I'LL  
 HAVE A REGULAR HAMBURGER, FRENCH FRIES AND A CARTON OF MILK INSTEAD.  
 THAT SHOULD CUT DOWN ON CALORIES SHOULDN'T IT BOB?  
 BOB: THAT SOUNDS LIKE A BETTER SELECTION FOR YOUR NUTRITIONAL  
 NEEDS, SUE.

AUDIO RUN TIME (SEC.)

**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

FADE IN TO BOB AND SUE TALKING  
 AND FADE OUT AS THEY FINISH AT COUNTER

VIDEO RUN TIME (SEC.)


**CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT**

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET  MEAL PLAN  5.5  TO   
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| INSTRUCTIONAL UNIT | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------------|--------------------|---------------|-----------|
| MEAL               |                    | QUESTION      |           |
|                    |                    | INDEX PAGE    |           |
|                    |                    | REMEDIATION   |           |
|                    |                    | HELP PAGE     |           |
|                    |                    | REINFORCEMENT |           |
|                    |                    | TESTING       |           |
|                    |                    | OBJECTIVE     |           |
|                    |                    | LESSON        |           |
|                    |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1  
 ( ) Track 2 SUE: BOB, WOULD YOU LIKE TO HAVE DINNER AT MY HOUSE TONIGHT?  
 WE ARE HAVING SIRLOIN STEAKS.  
 BOB: I'D LOVE TO, THANKS.  
 SUE: COME ON OVER AT ABOUT 6 O'CLOCK.  
 BOB: I'LL BE THERE.

AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY


( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

BOB AND SUE SEATED..TALKING

NO LINK

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION<br>KEY | INSTRUCTIONAL<br>UNIT | TYPE          | CONDITION |
|-----------------|-----------------------|---------------|-----------|
| NEXT            |                       | QUESTION      |           |
| PREVIOUS        |                       | INDEX PAGE    |           |
| HELP            |                       | REMEDIATION   |           |
| SEARCH          |                       | HELP PAGE     |           |
| QUIT            |                       | REINFORCEMENT |           |
|                 |                       | TESTING       |           |
|                 |                       | OBJECTIVE     |           |
|                 |                       | LESSON        |           |
|                 |                       | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

BOB: BOY, THIS SURE LOOKS GOOD!  
 SUE: (MURMURS SOMETHING AGREEABLE)

AUDIO RUN TIME


VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

- MOTION
- STILL
- LOCATION
- STUDIO
- 16mm
- 35mm
- VIDEOTAPE
- GRAPHIC
- VIDEOGRAPHIC
- OTHER

FAMILY SEATED AT THE TABLE. EVERYONE  
HELPING THEMSELVES TO THE FOOD AND  
PASSING IT AROUND THE TABLE.

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE:  MEAL PLAN MODULE/FILE:  5.5.2 INST'L. UNIT:  VIDEODISC TO  FRAME #

| FUNCTION | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|----------|--------------------|---------------|-----------|
| MEAL     |                    | QUESTION      |           |
|          |                    | INDEX PAGE    |           |
|          |                    | REMEDIATION   |           |
|          |                    | HELP PAGE     |           |
|          |                    | REINFORCEMENT |           |
|          |                    | TESTING       |           |
|          |                    | OBJECTIVE     |           |
|          |                    | LESSON        |           |
|          |                    | OTHER         |           |

COMPUTER DISPLAY

show nutrient profile of dinner

© CIPD 1981

AUDIO NARRATION

( ) Track 1 SUE: I REALIZE THAT I'VE HAD ALMOST ALL OF THE PROTEIN I  
 ( ) Track 2 NEED FOR TODAY BUT USUALLY MY PROTEIN INTAKE IS LOWER.  
 I THINK THAT ALL OF MY OTHER SELECTIONS FIT IN OK. WHAT DO YOU  
 THINK BOB?  
 BOB: IT SHOULD COMPLIMENT THE FOODS YOU'VE ALREADY EATEN TODAY  
 FAIRLY WELL.  
 NARRATOR: THE PROTEIN CONTENT OF THIS MEAL IS FAIRLY HIGH. IT SHOULD  
 BE NOTED THAT THE PEAS AND BREAD ALSO CONTRIBUTE PROTEIN TO THIS MEAL,  
 ALONG WITH THE MEAT.

AUDIO RUN TIME (SEC.)  35

VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF SUE TALKING TO BOB

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEOCD/MICROCOMPUTER PLANNING SHEET

DIET MEAL PLAN  TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| INSTRUCTIONAL UNIT | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------------|--------------------|---------------|-----------|
| MEAL               |                    | QUESTION      |           |
|                    |                    | INDEX PAGE    |           |
|                    |                    | REMEDIATION   |           |
|                    |                    | HELP PAGE     |           |
|                    |                    | REINFORCEMENT |           |
|                    |                    | TESTING       |           |
|                    |                    | OBJECTIVE     |           |
|                    |                    | LESSON        |           |
|                    |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

( ) Track 1 SUE: BOB, IS IT HARMFUL TO EXCEED THE RECOMMENDED DAILY INTAKE OF  
 ( ) Track 2 PROTEIN? ALSO, WHAT ABOUT EXCEEDING THE RECOMMENDED INTAKE OF THE  
 VARIOUS VITAMINS? BOB: IT'S A GOOD IDEA TO KEEP YOUR PROTEIN INTAKE   
 AROUND THE STANDARD AS A HIGH PROTEIN DIET CAN LEAD TO INCREASED  
 MOBILIZATION OF CALCIUM FROM THE BODY. AS FOR THE VITAMIN INTAKE, MOST ARE  
 WATER SOLUBLE VITAMINS AND THE EXCESS WILL BE EXCRETED BY THE BODY.  
 IT WOULD BE IMPOSSIBLE TO REACH TOXIC LEVELS OF VITAMINS BY EATING FOOD  
 ALONE. YOU CAN SEE WHERE VITAMIN SUPPLEMENTS WOULD BE UNNECESSARY FOR THE  
 HEALTHY INDIVIDUAL EATING A BALANCED DIET. NARRATOR: IT LOOKS LIKE SUE'S  
 INTAKE SO FAR FOR TODAY IS PRETTY GOOD. SHE COULD INCREASE HER INTAKE  
 OF CALORIES AND NEEDS TO INCREASE HER INTAKE OF IRON AND MAGNESIUM.   
 SHE HAS EXCEEDED THE STANDARD FOR SOME OF THE VITAMINS AND MINERALS. BUT AS  
 BOB HAS EXPLAINED, IT WOULD BE IMPOSSIBLE TO REACH TOXIC LEVELS BY FOOD  
 CONSUMPTION ALONE. SHE HAS ALSO EXCEEDED THE STANDARD FOR PROTEIN INTAKE.

VIDEODISC DISPLAY

( ) MOTION  ( ) CONCEPTUALLY LINKED TO   
 ( ) STILL   
 ( ) LOCATION   
 ( ) STUDIO   
 ( ) 16mm   
 ( ) 35mm   
 ( ) VIDEOTAPE   
 ( ) GRAPHIC   
 ( ) VIDEOGRAPHIC   
 ( ) OTHER

BOB TALKING TO SUE

VIDEO RUN TIME (SEC.)

**CIPD** CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L UNIT VIDEODISC FRAME #

| INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------------|---------------|-----------|
| MEASUREMENT        | QUESTION      |           |
|                    | INDEX PAGE    |           |
|                    | REMEDIATION   |           |
|                    | HELP PAGE     |           |
|                    | REINFORCEMENT |           |
|                    | TESTING       |           |
|                    | OBJECTIVE     |           |
|                    | LESSON        |           |
|                    | OTHER         |           |

COMPUTER DISPLAY

©CIPD 1981

AUDIO NARRATION

( ) Track 1 NARRATOR: WE HAVE NOW BEEN THROUGH MENU SELECTIONS FOR  
 ( ) Track 2 BREAKFAST, LUNCH AND DINNER. IF YOU ARE LIKE MOST PEOPLE, SNACKING IS AN EATING OCCASION THAT OCCURS ONCE OR TWICE A DAY. IT IS A GOOD IDEA TO PLAN FOR THESE SNACKS. SNACKS CAN BE VIEWED IN A POSITIVE LIGHT WHEN THEY ARE NUTRIENT DENSE AND CONTRIBUTE TO YOUR DAILY DIETARY INTAKE.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

- ( ) MOTION
- ( ) STILL
- ( ) LOCATION
- ( ) STUDIO
- ( ) 16mm
- ( ) 35mm
- ( ) VIDEOTAPE
- ( ) GRAPHIC
- ( ) VIDEOGRAPHIC
- ( ) OTHER

FADE OUT OF SUE AND BOB AT THE DINING ROOM TABLE.

VIDEO RUN TIME (SEC.)


**CENTER FOR INSTRUCTIONAL PRODUCT DEVELOPMENT**

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
 COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FUNCTION      | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| REMEDIAL      |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1 SUE: I AM KIND OF HUNGRY BUT I DON'T KNOW WHAT TO EAT.  
 Track 2 DO YOU THINK THAT MY DIET WAS LACKING IN ANY ONE NUTRIENT, BOB? BOB: IT IS HARD TO TELL SUE BUT, IT IS USUALLY DIFFICULT FOR YOUNG WOMEN TO GET ENOUGH IRON IN THEIR DIET.  
 SUE: WHAT TYPES OF SNACK FOODS ARE GOOD SOURCES OF IRON?  
 BOB: DRIED FRUITS AND ENRICHED GRAINS CAN BE FAIRLY GOOD SOURCES OF IRON.  
 SUE: LET'S GO IN THE KITCHEN AND SEE WHAT WE HAVE.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

() CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

PICTURE OF SUE AND BOB ON SOFA

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

TO   
COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| VIDEO ITEM # | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|--------------|--------------------|---------------|-----------|
|              |                    | QUESTION      |           |
|              |                    | INDEX PAGE    |           |
|              |                    | REMEDIATION   |           |
|              |                    | HELP PAGE     |           |
|              |                    | REINFORCEMENT |           |
|              |                    | TESTING       |           |
|              |                    | OBJECTIVE     |           |
|              |                    | LESSON        |           |
|              |                    | OTHER         |           |

COMPUTER DISPLAY

show nutrient profile for whole wheat crackers and raisins

© CIPD 1981

AUDIO NARRATION

( ) Track 1 SUE: HERE ARE SOME ENRICHED WHOLE WHEAT CRACKERS, AND WE HAVE  
 ( ) Track 2 SOME RAISINS. THESE SHOULD INCREASE MY INTAKE OF IRON.  
 BOB: RIGHT SUE.

AUDIO RUN TIME (SEC.)


VIDEODISC DISPLAY

( ) CONCEPTUALLY LINKED TO

( ) MOTION  
 ( ) STILL  
 ( ) LOCATION  
 ( ) STUDIO  
 ( ) 16mm  
 ( ) 35mm  
 ( ) VIDEOTAPE  
 ( ) GRAPHIC  
 ( ) VIDEOGRAPHIC  
 ( ) OTHER

PICTURE OF SUE LOOKING THROUGH THE CUPBOARD. SEES RAISINS AND BOX OF WHOLE WHEAT CRACKERS. TALKS WITH BOB.

VIDEO RUN TIME (SEC.)

 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT



VIDEODISC/MICROCOMPUTER PLANNING SHEET

SNACK  TO

COURSE MODULE/FILE INST'L. UNIT VIDEODISC FRAME #

| FRONT PANEL   | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MEALS         |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | REMEDIATION   |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

**COMPUTER DISPLAY**

REMEMBER TO PLAN AHEAD FOR FOODS YOU MIGHT EAT AT MEALS LATER IN THE DAY AND FOR SNACKS. THIS IS THE BEST WAY TO STAY WITHIN YOUR NUTRIENT AND CALORIC NEEDS.

AFTER 5 SECONDS, PRINT THE NUTRIENT PROFILE FOR THE ENTIRE DAYS INTAKE.

© CIPD 1981

**AUDIO NARRATION**

( ) Track 1  
( ) Track 2


AUDIO RUN TIME (SEC.)

**VIDEODISC DISPLAY**

( ) CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

VIDEODISC/MICROCOMPUTER PLANNING SHEET

DIET COURSE  24 HOUR MODULE/FILE  7.0 INST'L. UNIT  TO  VIDEODISC  FRAME #

| FUNCTIONS     | INSTRUCTIONAL UNIT | TYPE          | CONDITION |
|---------------|--------------------|---------------|-----------|
| MENU          |                    | QUESTION      |           |
| INDEX         |                    | INDEX PAGE    |           |
| OBJECTIVE     |                    | PERMISSION    |           |
| HELP          |                    | HELP PAGE     |           |
| REINFORCEMENT |                    | REINFORCEMENT |           |
| TESTING       |                    | TESTING       |           |
| OBJECTIVE     |                    | OBJECTIVE     |           |
| LESSON        |                    | LESSON        |           |
| OTHER         |                    | OTHER         |           |

COMPUTER DISPLAY

© CIPD 1981

AUDIO NARRATION

Track 1  
 Track 2

NARRATOR: NOW THAT YOU HAVE OBSERVED SUE MAKING FOOD SELECTIONS, YOU GIVE IT A TRY.

THE PREVIOUS NUTRITION INFORMATION IS TO HELP YOU MAKE EDUCATED DECISIONS IN SELECTING WHAT YOU EAT. REMEMBER, THE FINAL DECISION IS YOURS.


AUDIO RUN TIME (SEC.)

VIDEODISC DISPLAY

CONCEPTUALLY LINKED TO

MOTION  
 STILL  
 LOCATION  
 STUDIO  
 16mm  
 35mm  
 VIDEOTAPE  
 GRAPHIC  
 VIDEOGRAPHIC  
 OTHER

VIDEO RUN TIME (SEC.)


 CENTER FOR INSTRUCTIONAL  
 PRODUCT DEVELOPMENT

Appendix D

Foods Used for Determination of Food Group

Nutrient Profiles

Foods Used for Determination of Food Group  
Nutrient Profiles

Milk Group

| <u>Food Code</u> | <u>Food</u>    | <u>Measure</u>    | <u>Gram Amount</u> |
|------------------|----------------|-------------------|--------------------|
| 1                | Whole milk     | 1 cup             | 244                |
| 34               | Cottage cheese | $\frac{1}{2}$ cup | 105                |
| 9                | Yogurt, lowfat | 1 cup             | 227                |
| 28               | Cheddar cheese | 1 ounce           | 28                 |

Meat Group

|     |                         |        |     |
|-----|-------------------------|--------|-----|
| 52  | Ground beef, 15% fat    | 2 oz.  | 56  |
| 95  | Chicken breast, no skin | 2 oz.  | 56  |
| 129 | Filet of sole           | 2 oz.  | 56  |
| 153 | Red kidney beans        | 1 cup  | 200 |
| 163 | Split peas              | 1 cup  | 200 |
| 173 | Peanut butter           | 4 Tbsp | 64  |
| 147 | Eggs                    | 1      | 50  |

Bread and Cereal Group

|     |                      |                   |     |
|-----|----------------------|-------------------|-----|
| 185 | Whole wheat bread    | 1 slice           | 28  |
| 232 | Shedded wheat cereal | 1 oz.             | 25  |
| 226 | Farina               | $\frac{1}{2}$ cup | 123 |
| 220 | Spaghetti            | $\frac{1}{2}$ cup | 70  |
| 217 | Macaroni             | $\frac{1}{2}$ cup | 70  |
| 218 | Noodles              | $\frac{1}{2}$ cup | 80  |
| 223 | Rice                 | $\frac{1}{2}$ cup | 80  |
| 193 | Muffin               | 1                 | 36  |

Vegetable and Fruit Group

|     |                 |                   |     |
|-----|-----------------|-------------------|-----|
| 233 | Grapefruit      | $\frac{1}{2}$     | 200 |
| 255 | Apple           | 1 small           | 115 |
| 237 | Orange          | 1 small           | 131 |
| 269 | Peach           | 1 small           | 115 |
| 262 | Canteloupe      | $\frac{1}{4}$     | 239 |
| 308 | Potato, baked   | 1 small           | 135 |
| 329 | Spinach, cooked | $\frac{1}{2}$ cup | 102 |
| 335 | Carrot, raw     | 1 cup             | 81  |

Other Group

| <u>Food Code</u> | <u>Food</u>    | <u>Measure</u> | <u>Gram Amount</u> |
|------------------|----------------|----------------|--------------------|
| 204              | Raised donut   | 1              | 42                 |
| 435              | Soft drink     | 8 oz.          | 369                |
| 431              | Milk chocolate | 1 oz.          | 30                 |

Appendix E

Pre- and Post-test and Feedback Survey





# Utah State University

DEPARTMENT OF NUTRITION AND FOOD SCIENCES

MEMORANDUM

**DATE:** August 16, 1982  
**TO:** Mike DeBloois, R. Gaurth Hansen, Georgia Lauritzen, Art Mahoney,  
Nick Eastmond  
**FROM:** Glenda Wigginton

Thank you for agreeing to evaluate this portion of my thesis project. Enclosed are the Pre and Post Tests, Validity Assessment Forms, Performance Objectives and Feedback Survey for the nutrition education program I have developed. The interactive program, on videodisc interfaced with the Apple II microcomputer, teaches dietary guidance using dietary guidelines and the Index of Nutritional Quality. Please follow the instructions on the Validity Assessment Forms to evaluate the pre and post tests. Make any comments regarding the Feedback Survey on the sheet following the survey. Please send the completed Validity Assessment Forms and Feedback Survey comment sheet to my home in the self-addressed envelope enclosed. Thank you for your help.

Glenda Wigginton  
421 Grove St.  
Sierra Madre, CA 91024

(213) 355-2144

TEACHING DIETARY GUIDANCE  
TO YOUNG ADULTS  
USING THE  
INDEX OF NUTRITIONAL QUALITY  
PERFORMANCE OBJECTIVES

Upon completion of the nutrition education program, the student will be able to do the following with at least 80% accuracy on the corresponding computerized criterion referenced test:

1. Identify the seven dietary guidelines as outlined in the instructional program.
2. Identify specific nutritional components of each dietary guideline.
3. Recognize disease conditions which have been associated with over consumption of specific nutrients.
4. Identify the correct meaning of the terms nutrient dense and calorie dense.
5. Identify the nutrients which are found in good supply in a food when compared with its energy contributions.
6. Evaluate a meal determining if it is nutrient dense or calorie dense.
7. Revise a calorie dense meal making it nutrient dense.
8. Plan meals and snacks for a period of twenty-four hours.

VALIDITY ASSESSMENT  
FORM A (For Pre Test)

Please read each question on the pre test and then rate its validity in assessing achievement of the corresponding objective (listed below) by circling the most appropriate number: 1 -- Very Valid, 2 -- Somewhat Valid, 3 -- Invalid. If numbers 2 or 3 are circled, please give suggestions for improvement in the space provided.

| <u>QUESTION NUMBER</u> | <u>CORRECT RESPONSE</u> | <u>OBJECTIVE</u> | <u>VALIDITY</u> |   |   |
|------------------------|-------------------------|------------------|-----------------|---|---|
| 1                      | b                       | 1                | 1               | 2 | 3 |
| 2                      | c                       | 2                | 1               | 2 | 3 |
| 3                      | b                       | 2                | 1               | 2 | 3 |
| 4                      | b                       | 2                | 1               | 2 | 3 |
| 5                      | d                       | 2                | 1               | 2 | 3 |
| 6                      | a                       | 2                | 1               | 2 | 3 |
| 7                      | d                       | 2                | 1               | 2 | 3 |
| 8                      | c                       | 2                | 1               | 2 | 3 |
| 9                      | b                       | 2                | 1               | 2 | 3 |
| 10                     | d                       | 3                | 1               | 2 | 3 |
| 11                     | d                       | 2                | 1               | 2 | 3 |
| 12                     | a                       | 3                | 1               | 2 | 3 |
| 13                     | d                       | 2                | 1               | 2 | 3 |
| 14                     | c                       | 2                | 1               | 2 | 3 |
| 15                     | b                       | 3                | 1               | 2 | 3 |
| 16                     | d                       | 2                | 1               | 2 | 3 |
| 17                     | c                       | 3                | 1               | 2 | 3 |
| 18                     | true                    | 4                | 1               | 2 | 3 |
| 19                     | c                       | 5                | 1               | 2 | 3 |
| 20                     | a                       | 5                | 1               | 2 | 3 |
| 21                     | c                       | 5                | 1               | 2 | 3 |
| 22                     | c                       | 5                | 1               | 2 | 3 |
| 23                     | d                       | 6                | 1               | 2 | 3 |
| 24                     | b                       | 7                | 1               | 2 | 3 |

Comments and suggestions on specific test items for improvement of validity and clarity. (Indicate the item you are commenting on):

## PRE TEST

1. Which of the following is not a dietary guideline?
  - a. maintain ideal weight
  - b. avoid intake of foods with starch and fiber
  - c. avoid intake of too much sugar
  - d. avoid intake of too much fat and cholesterol
  
2. How can one best incorporate the guideline, "Eat a Variety of Foods", in the diet?
  - a. by consuming adequate fruits and vegetables
  - b. by consuming large amounts of food
  - c. by consuming appropriate servings of food from each of the Basic 4 + 1 Food Groups
  - d. by consuming foods of various ethnic origins
  
3. Which of the following foods does not belong in the Milk and Cheese Group?
  - a. Swiss cheese
  - b. butter
  - c. yogurt
  - d. whole milk
  
4. Which of the following foods belongs in the Meat, Poultry, Fish and Beans Group?
  - a. yogurt
  - b. peanut butter
  - c. cottage cheese
  - d. green beans
  
5. Fruits and vegetables tend to be good sources of:
  - a. calcium and riboflavin
  - b. fiber
  - c. vitamins A & C
  - d. both b and c
  
6. Items from the Milk and Cheese group tend to be good sources of:
  - a. calcium and riboflavin
  - b. fiber
  - c. vitamin C
  - d. thiamin

7. Items from the Fats, Sweets and Alcohol Group contribute primarily:
  - a. protein
  - b. calcium and riboflavin
  - c. vitamin C
  - d. calories
8. Consuming more calories than is burned will result in:
  - a. weight maintenance
  - b. a decrease in weight
  - c. an increase in weight
  - d. none of the above
9. To lose weight, start by cutting back on servings from the:
  - a. Bread and Cereal Group
  - b. Fats, Sweets and Alcohol Group
  - c. Meat, Poultry, Fish and Beans Group
  - d. Milk and Cheese Group
10. Individuals with high blood cholesterol levels have an increased risk of having heart attack. Consumption of large amounts of which nutrient(s) may increase blood cholesterol levels?
  - a. cholesterol
  - b. fat
  - c. sodium
  - d. both a and b
11. To avoid too much fat and cholesterol in the diet one could:
  - a. limit intake of butter, margarine, shortening, etc.
  - b. broil, bake or boil instead of frying foods
  - c. choose lean meat, fish and poultry; dry beans and peas as protein sources
  - d. all of the above
12. The major health hazard from eating too much sugar is:
  - a. tooth decay
  - b. diabetes
  - c. heart disease
  - d. osteoporosis
13. To avoid excess sugar in the diet one could:
  - a. eat less of all sugars
  - b. eat less candy, soft drinks, etc.
  - c. select fresh fruits rather than fruit canned in heavy syrup
  - d. all of the above



14. If you are trying to maintain ideal weight you may want to limit consumption of alcoholic beverages because they are:
  - a. high in calories
  - b. low in nutrients other than calories
  - c. both a and b
  - d. none of the above
15. The major health hazard associated with excessive sodium intake is:
  - a. diabetes
  - b. high blood pressure
  - c. tooth decay
  - d. none of the above
16. To avoid too much sodium in the diet one could:
  - a. cook with small amounts of added salt
  - b. limit intake of foods such as potato chips or pretzels
  - c. learn to enjoy the unsalted flavors of food
  - d. all of the above
17. Eating foods high in fiber may be beneficial in reducing the symptoms of:
  - a. chronic constipation
  - b. diverticulosis
  - c. both a and b
  - d. none of the above
18. True or False. Foods which contain substantial amounts of various nutrients in relationship to their caloric content are called nutrient dense foods.
19. Select the food which is the most calcium dense per standard serving:
  - a. chocolate ice cream
  - b. fruit flavored yogurt
  - c. low fat milk
  - d. whole milk
20. Select the food which is the most cholesterol dense per standard serving:
  - a. butter
  - b. corn oil
  - c. pancake
  - d. margarine

21. Select the food which is the most vitamin C dense per standard serving:
- a. peach
  - b. banana
  - c. orange
  - d. apple

22. Select the food which is the most iron dense per standard serving:

- a. banana
- b. low fat milk
- c. hamburger patty
- d. peanut butter

23. Select the meal with the lowest nutrient density.

- a. roast beef sandwich, whole milk, orange
- b. cheese and crackers, apple, carrot sticks
- c. spaghetti with meat sauce, french bread, strawberries, zucchini
- d. fried chicken, mashed potatoes with gravy, gelatin

24. A typical lunch consumed by many Americans is:

Hamburger on bun  
Milkshake  
French fries

To reduce the calories in this lunch one could replace the French fries with:

- a. fruit pie
- b. banana
- c. potato chips
- d. none of the above

VALIDITY ASSESSMENT  
FORM B (For Post Test)

Please read each question on the Post Test and then rate its validity in assessing achievement of the corresponding objective (listed below) by circling the most appropriate number: 1 -- Very Valid, 2 -- Somewhat Valid, 3 -- Invalid. If numbers 2 or 3 are circled, please give suggestions for improvement in the space provided.

| <u>QUESTION NUMBER</u> | <u>CORRECT RESPONSE</u>                                | <u>OBJECTIVE</u> | <u>VALIDITY</u> |
|------------------------|--|------------------|-----------------|
| 1                      | c  | 1                | 1 2 3           |
| 2                      | c  | 2                | 1 2 3           |
| 3                      | b  | 2                | 1 2 3           |
| 4                      | a  | 2                | 1 2 3           |
| 5                      | d  | 2                | 1 2 3           |
| 6                      | d  | 2                | 1 2 3           |
| 7                      | c  | 2                | 1 2 3           |
| 8                      | c  | 2                | 1 2 3           |
| 9                      | d  | 2                | 1 2 3           |
| 10                     | a  | 3                | 1 2 3           |
| 11                     | b  | 2                | 1 2 3           |
| 12                     | a  | 3                | 1 2 3           |
| 13                     | c  | 3                | 1 2 3           |
| 14                     | c  | 2                | 1 2 3           |
| 15                     | d  | 3                | 1 2 3           |
| 16                     | a  | 2                | 1 2 3           |
| 17                     | d  | 2                | 1 2 3           |
| 18                     | false  | 4                | 1 2 3           |
| 19                     | a  | 5                | 1 2 3           |
| 20                     | b  | 5                | 1 2 3           |
| 21                     | b  | 5                | 1 2 3           |
| 22                     | b  | 5                | 1 2 3           |
| 23                     | c  | 6                | 1 2 3           |
| 24                     | c  | 7                | 1 2 3           |
| 25                     | meeting 80% of<br>standard for 80%<br>of the nutrients | 8                | 1 2 3           |

## POST TEST

1. Which of the following is not a dietary guideline?
  - a. eat a variety of foods
  - b. if you drink, do so in moderation
  - c. eat foods with adequate sugar
  - d. avoid intake of too much fat and cholesterol
  
2. By consuming appropriate servings from each of the 4 + 1 Food Groups, one is following the guideline:
  - a. avoid intake of too much sugar
  - b. maintain ideal weight
  - c. eat a variety of foods
  - d. avoid intake of too much fat and cholesterol
  
3. Which of the following foods does not belong in the Bread and Cereal Group?
  - a. rice
  - b. potato
  - c. macaroni
  - d. whole wheat bread
  
4. Which of the following foods belongs in the Meat, Poultry, Fish and Beans Group?
  - a. eggs
  - b. Cheddar cheese
  - c. rice
  - d. yogurt
  
5. Breads and Cereals made with whole grains or enriched flour tend to be good sources of:
  - a. fiber
  - b. B vitamins and iron
  - c. calcium
  - d. both a and b
  
6. Items from the Meat, Poultry, Fish and Beans Group tend to be good sources of:
  - a. protein
  - b. vitamin C
  - c. vitamins B6 and B12
  - d. both a and c

7. The food group contributes primarily calories to the diet is the:
  - a. Fruit and Vegetable Group
  - b. Bread and Cereal Group
  - c. Fats, Sweets and Alcohol Group
  - d. Milk and Cheese Group
  
8. In order to maintain ideal weight, one must:
  - a. take in more calories than you burn
  - b. get plenty of exercise
  - c. take in only as many calories as you burn
  - d. take in fewer calories than you burn
  
9. To lose weight, it is best to begin by:
  - a. increasing physical activity
  - b. cut back on fats, sweets and alcohol
  - c. eat less than 800 kilocalories per day
  - d. both a and b
  
10. Consumption of large amounts of fat and cholesterol containing foods may increase blood cholesterol levels in some individuals. High blood cholesterol levels increase the risk of:
  - a. heart attack
  - b. osteoporosis
  - c. cancer
  - d. all of the above
  
11. Trimming excess fat off of meats and limiting intake of butter, margarine and shortening are two methods of:
  - a. decreasing sodium intake
  - b. decreasing fat and cholesterol intake
  - c. decreasing sugar intake
  - d. all of the above
  
12. Tooth decay is the major health hazard associated with eating too much:
  - a. sugar
  - b. fat
  - c. carbohydrate
  - d. protein

13. Since alcoholic beverages are high in calories and low in most other nutrients one may want to limit consumption of these items to:
  - a. decrease risk of tooth decay
  - b. decrease risk of heart disease
  - c. maintain ideal weight
  - d. none of the above
14. Eating less of foods such as candy or soft drinks is one way to decrease consumption of:
  - a. fat
  - b. sodium
  - c. sugar
  - d. all of the above
15. High blood pressure has been associated with excessive intake of:
  - a. fat
  - b. alcohol
  - c. cholesterol
  - d. sodium
16. Pickled foods, cured meats and condiments such as soy sauce and garlic salt should be used in moderation as they are high in:
  - a. sodium
  - b. fat
  - c. sugar
  - d. cholesterol
17. Foods which are high in fiber include:
  - a. whole grain breads and cereals
  - b. fruits and vegetables
  - c. beans, peas and nuts
  - d. all of the above
18. True or False. Foods which contain minimal amounts of nutrients in relationship to their caloric content are called nutrient dense foods.
19. Select the food which is the most sodium dense per standard serving:
  - a. dill pickle
  - b. green beans
  - c. cucumber
  - d. apple

20. Select the food which is the most vitamin C dense per standard serving:
- French fries
  - baked potato
  - potato sticks
  - potato chips
21. Select the food which is the most protein dense per standard serving:
- orange
  - egg
  - cornflakes
  - Cheddar cheese
22. Select the food which is the most vitamin A dense per standard serving:
- tuna
  - watermelon
  - macaroni
  - whole wheat bread
23. Select the meal with the highest nutrient density:
- hot dog on bun, potato chips, apple juice
  - fried chicken, macaroni salad, gelatin
  - pork chop, carrots, rice, strawberries, whole milk
  - peanut butter and jelly sandwich, cola drink
24. The following snack is typical of many Americans:
- Donut  
Cola drink
- To make this snack more nutrient dense one could replace the cola drink with:
- fruit juice
  - milk
  - either a or b
  - none of the above
25. You have learned about how to make appropriate food choices using dietary guidelines and the Index of Nutritional Quality.

Using the Food Code Booklet and accompanying worksheet, plan meals and snacks for a period of twenty-four hours. When finished, enter the information as requested into the computer.



## FEEDBACK SURVEY

PLEASE SELECT THE ANSWER TO THE FOLLOWING QUESTIONS WHICH MOST CORRECTLY DESCRIBES YOUR FEELING ABOUT EACH OF THE FOLLOWING STATEMENTS.

1. The meals and snacks I have just planned as an exercise in this program I would actually eat.
  - a. strongly agree
  - b. agree
  - c. disagree
  - d. strongly disagree
  
2. This program has increased my knowledge of appropriate dietary practices.
  - a. strongly agree
  - b. agree
  - c. disagree
  - d. strongly disagree
  
3. The "Dietary Guidelines" will be useful to me in making food choices.
  - a. strongly agree
  - b. agree
  - c. disagree
  - d. strongly disagree
  
4. The "Index of Nutritional Quality" has increased my understanding of the "Dietary Guidelines."
  - a. strongly agree
  - b. agree
  - c. disagree
  - d. strongly disagree
  
5. I plan on making changes in my current eating habits to more closely follow the information presented in this program.
  - a. strongly agree
  - b. agree
  - c. disagree
  - d. strongly disagree

Comments and suggestions on Feedback Survey (Indicate item you are commenting on):