Clinical & Community Nutrition

Student Manual
Part II "Community"

Developed for the Nutrition Assistant Program
at
City College of San Francisco

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Preface

This manual was written for students in the Nutrition Assistant Program to serve as a guide in the study of *Clinical and Community Nutrition,* a required course in the program.

The manual is divided into two parts: *Part I – Clinical Nutrition* and *Part II – Community Nutrition.* The first part introduces the student to the basic principles of medical nutrition therapy; the second part covers basic skills in delivering nutrition services in community health settings with emphasis on nutrition education.

Each lesson includes the following: learning objectives, instructional materials, and subject matter for discussion. The subject matter presented provides background knowledge for the nutrition assistant student to draw upon and apply in the field experience training and beyond.

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<u>**Lesson I**</u>

INTRODUCTION TO COMMUNITY NUTRITION

OBJECTIVES:

In this lesson, the student will:

1. Differentiate between the terms *community nutrition* and *public health nutrition*.
2. Enumerate the goals for community nutrition programs.
3. Discuss the three basic nutrition guides used in planning and implementing community nutrition program.
4. Discuss present trends in community nutrition.

ASSIGNMENTS:
1. Read Lesson I *Introduction to Community Nutrition* in student manual.
2. Read and be prepared to answer discussion questions

I. DEFINITIONS

Although the terms *community nutrition* and *public health nutrition* are frequently used to mean the same, there is actually a difference in their meanings.

Community nutrition is the branch of nutrition that works with health and illnesses of the individual and family as part of the community with emphasis on prevention of disease and maintenance of health through the interaction of nutrition personnel and community.

Public health nutrition is the nutrition program conducted by a state, county, city, or other governmental agency that has the responsibility for the health of persons living in the area under its jurisdiction.

II. GOALS FOR COMMUNITY NUTRITION PROGRAMS

A *community nutrition program* is one planned to improve the nutrition of individuals and groups in a *community*. A *community* refers to a specific group of people who have something in common such as a common language (e.g. Spanish), the same stage in life (e.g. infancy, adolescence, pregnancy, etc.), or the same health problems (e.g. high blood pressure).

Goals for Community Nutrition Programs

A community nutrition program should be designed to achieve specific goals for the population segment being targeted. These goals are to:

1. promote good nutrition and health practices,
2. identify actual or potential nutrition problems and take action to correct or prevent them,
3. identify and correct existing nutrition problems, and
4. treat nutrition-related diseases and conditions.

Community nutrition programs may be conducted by public agencies like health departments, by voluntary health agencies such as the American Cancer Society, by public schools, colleges and universities, or by other organizations. Regardless of the agency conducting the program, these goals apply to all community nutrition programs.

III. NUTRITION GUIDES USED IN COMMUNITY NUTRITION PROGRAMS

A. Dietary Reference Intakes (DRIs)

In 1997, the Food and Nutrition Board of the National Academy of Sciences did something dramatic: they changed the way nutritionists and nutrition scientists evaluate the diets of healthy people with the creation of the Dietary Reference Intakes (DRIs). Remember the Recommended Dietary Allowances (RDAs)? From 1941 until 1989, the RDAs were established and used to evaluate and plan menus that would meet the nutrient requirements of groups as well as other applications such as interpreting food consumption records of populations, establishing standards for food assistance programs, establishing guidelines for nutrition labeling, to name a few. Their primary goal was to prevent diseases caused by nutrient deficiencies. Technically speaking, the RDAs were not intended to evaluate the diets of individuals, but they were often used this way.

In the early 1990s, the Food and Nutrition Board, after much consideration, undertook the task of revising the RDAs and a new family of nutrient reference values was born—the Dietary Reference Intakes (DRIs). There are four types of DRI reference values: the Estimated Average Requirement (EAR), the Recommended Dietary Allowance (RDA), the Adequate Intake (AI) and the Tolerable Upper Intake Level (UL). (See Box for definitions of these values). The primary goal of having new dietary reference values was to not only prevent nutrient deficiencies, but also reduce the risk of chronic diseases such as osteoporosis, cancer, and cardiovascular disease.

Dietary Reference Intakes Definitions

Recommended Dietary Allowance (RDA): the average daily dietary intake level that is sufficient to meet the nutrient requirement of nearly all (97 to 98 percent) healthy individuals in a particular life stage and gender group.

Adequate Intake (AI): a recommended intake value based on observed or experimentally determined approximations or estimates of nutrient intake by a group (or groups) of healthy people, that are assumed to be adequate—used when an RDA cannot be determined.

Tolerable Upper Intake Level (UL): the highest level of daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals in the general population. As intake increase above the UL, the potential risk of adverse effects increases.

Estimated Average Requirement (EAR): a daily nutrient intake value that is estimated to meet the requirement of half of the healthy individuals in a life stage and gender group—used to assess dietary adequacy and as the basis for the RDA.

B. Dietary Guidelines

Dietary Guidelines for Americans is published jointly every 5 years by the Department of Health and Human Services (HHS) and the Department of Agriculture (USDA). The *Guidelines* provide authoritative advice for people two years and older about how good dietary habits can promote health and reduce risk for major chronic diseases.

The 2005 Dietary Guidelines for Americans are:

- Consume a variety of foods within and among the basic food groups while staying within energy needs.
- Control calorie intake to manage body weight.
- Be physically active each day.
- Increase daily intake of fruits and vegetables, whole grains and nonfat or low-fat milk and milk products.
- Choose fats wisely for good health.
- Choose carbohydrates wisely for good health.
- Choose and prepare foods with little salt.
- If you drink alcoholic beverages, do so in moderation.
- Keep food safe to eat.

http://www.health.gov/dietaryguidelines/

C. MyPyramid

This 2005 food guidance system replaces the previous Food Guide Pyramid. MyPyramid was developed and published by the U.S. Department of Agriculture to provide a practical guide to serve as basis for planning adequate, balanced diets. Review the website at http://www.mypyramid.gov/index.html.

IV. PRESENT TRENDS IN PUBLIC HEALTH AND NUTRITION

There are projected changes that influence patterns of health, disease and nutritional status of populations in the community. All who work in public health must keep track of health trends in the communities they work so that programs and services can be planned accordingly.

A. Present trends that affect community nutrition include:

- Increase in the number of dependent children or elderly,
- Growing numbers of children living in homes with a single parent and often in poverty,
- Increase in numbers of mothers of young children employed outside the home,
- Increase in individuals and families who are homeless, living in shelters or substandard housing,
- Greater mix of ethnic minorities, many of whom speak only their native language and have their own food customs and practices,
- Changing patterns of chronic and communicable diseases,
- Increasing number of youths and young adults who are addicted to alcohol or illegal drugs.

B. Present trends that affect working in community nutrition include:

- Greater use of computers to quickly and accurately access and input data, etc.,
- New communication and media technology available to reach the population with health and nutrition messages,
- Advances in medical, biological, genetic, food, and nutrition research,
- Availability of many new food products and services to respond to the needs of the population,
- A more educated public that is motivated to take greater responsibility for personal and family health, and
- Increasing acceptance by employers and employees of health promotion programs as a way of increasing employee morale and productivity and controlling health care costs.

DISCUSSION QUESTIONS:

1. The Dietary Guidelines for Americans are aimed at public health promotion and chronic disease prevention. What nutrition-related diseases or conditions are targeted by the dietary guidelines?

2. Review IV – A. Present trends that affect community nutrition. Discuss how each trend affects health and/or nutrition programs and services.

3. Review IV – B Present trends that affect working in community nutrition. Give specific examples of these trends.

SOURCE: Kaufman, M. *Understanding Public Health* in *Nutrition in Public Health: A Handbook for Developing Programs and Services*, Aspen Publishers, 1990, pages 6-7.

LESSON II – 1

BASIC SKILLS IN NUTRITION EDUCATION
Assessing Needs and Planning

OBJECTIVES:

In this lesson, the student will:

1. Conduct preassessment to identify the nutrition education needs of the group.
2. Write clear and measurable performance objectives for a nutrition education presentation on a selected/assigned topic.
3. Determine the content of the presentation based on needs assessment and objectives.
4. Select methods, materials, and resources appropriate to the objectives and the group.

ASSIGNMENTS:

1. Read Lesson II – 1 *Basic Skills in Nutrition Education: Assessing Needs and Planning*.
2. Answer discussion questions.
3. Nutrition education project: Select a topic for oral presentation. Submit for approval.

MATERIALS:

1. Instructions for nutrition education project.
2. Format for nutrition education lesson plan.
3. Activity work sheet

Much of the work in the community nutrition is the education of individuals and groups. The emphasis of this and the next lesson is on certain processes that are involved in the various skills and techniques for nutrition education. These skills involve both the educational process and the behavior change process since the improvement of nutrition practices requires a change in behavior. Those doing work in community nutrition must learn these skills and use them effectively: establishing rapport, interviewing, motivating, teaching, instructing, and counseling. (NOTE: Establishing rapport, interviewing, and counseling are covered in the course *Life Span Nutrition and Assessment*. Please review the material.)

Nutrition education can be defined as any set of learning experiences intended to help in the voluntary adoption of food practices and other nutrition-related behaviors that promote health and well-being.

The three groups of people who are important targets for nutrition education include:

- Individuals or groups of individuals who provide opportunities for teaching good food practices,
- Persons who are responsible for the family food in order to help them feed their families properly, and
- Persons who provide food for people away from home, such as those who work for food service in hospitals, skilled nursing facilities, school cafeterias, child care centers, etc.

I. THE EDUCATIONAL PROCESS

A. Steps or components

1. Assess the needs of the individual or group.
2. Plan and write performance objectives that are measurable and attainable in a given period of time.
3. Determine the content based on the objectives and the needs of the group.
4. Select teaching methods, techniques, materials, and resources appropriate for the group and the objectives.
5. Implement the learning experiences and provide opportunities for the learners to practice the new information.
6. Evaluate the progress of the learners continuously and at given intervals, including a reassessment of learning needs.
7. Document the results of education.

B. Environment

The educational environment is important in increasing the learning process. The educational environment includes:

1. Psychological environment

The climate for learning largely depends on the approach of the educator. To create a caring environment that encourages learning, the educator should:

- Make learners feel secure and welcome by showing respect for individual and cultural differences, and tolerance for mistakes,
- Create an informal atmosphere by encouraging of questions and openness,
- Know learners by their names and show respect for their opinions,
- Encourage learners to introduce themselves and get to know each other during the first session, and
- Promote working together and helping each other instead of competing with each other.

2. Physical environment

Physical conditions that promote learning include:

- Appropriate temperature, good lighting and ventilation, and comfortable chairs,
- Quiet, pleasant room so that distractions like people talking, telephone ringing, etc. do not compete for the learners' attention,
- Room arrangement to allow learners to both see and hear, and
- Seating learners in a circle or around a table (instead of rows of chairs) to allow eye contact and to encourage more interaction.

II. ASSESSING NEEDS

The first step in education is to establish a starting point. This is accomplished by conducting a needs assessment or preassessment. In needs assessment, the educator finds out the learner's current knowledge, skills, abilities, attitudes, interests, personality, educational background, age, culture, lifestyle, and readiness to learn. This information should be the basis for planning nutrition education.

Needs assessment can be conducted informally or formally. Information can be gathered informally through oral interviews. In general, the questions asked should be planned around what the learner needs to know or would like to know. Examples: *Did you breastfeed your other children? Can you tell me what foods are good sources of iron? Can you explain why you are on this diet?*

In more formal situations and when time is available, a needs assessment questionnaire, also referred to as *pretest*, can be developed and administered. The pretest is a tool to evaluate the learner's knowledge and abilities before teaching begins. When the teaching is completed, the pretest can be compared to the posttest results to evaluate what was learned.

More difficult to evaluate but just as important to the learning process is psychological preassessment. Problems in learning may not be due to lack of understanding but due to the learner's motivation, attitudes, values, and beliefs. Acquisition of nutrition information is a prerequisite for better eating practices but knowledge by itself does not necessarily lead to improved eating practices unless the participant is motivated and perseveres to change his/her behavior. For example: The participant on a sodium-restricted diet may know what foods are high in sodium but continues to eat pickles, salted chips, etc. due to lack of motivation.

III. PLANNING

A. Writing performance objectives

Performance objectives, sometimes referred to as behavioral objectives, are statements of what is to be learned by the participant after the instruction. Performance objectives specify the participant's behavior or capability after the instruction is completed; focus on the purpose of instruction. Performance objectives are necessary in planning, implementing, and evaluating learning.

It is accepted that learning is not only acquiring knowledge but also changing attitudes and feelings that lead to behavior change (e.g. improved eating practices). Therefore, it follows that performance objectives fall into three classifications to address three different areas of learning or domains, as published by Bloom, B.S. and others:

1. Cognitive domain – deals with recall of knowledge or information. Example: *…will list five foods high in fiber.*
2. Psychomotor domain – deals with manual skills. Example: *… will operate a meat slicer…*
3. Affective domain – deals with interest, attitudes, belief and values. Example: *… will choose a low fat meal from the restaurant menu.*

Guidelines for writing performance objectives developed by Robert Mager are highlighted in Table II – 1.1

B. Planning the Content and Learning Activities

In each specific nutrition education situation, the educator is responsible for deciding how much of the subject matter is really basic to the development or maintenance of healthy food practices. Both the needs assessment and performance objectives help to identify the content of the instruction. In community nutrition, most opportunities for nutrition education are brief, often with distractions. These conditions make it necessary for the educator to select and focus on only one or two practices that is most important to change until the desired outcome is achieved.

TABLE II – 1.1 Guidelines for Writing Performance Objectives

1. Objective should focus on the intended result in the person learning, <u>not</u> on the educator.

   Incorrect: *The nutrition assistant will teach the participant the sodium-restricted diet.*
   Correct: *After instruction, the participant will be able to select foods appropriate for the sodium-restricted diet.*

2. Objectives should use verbs that describe desired results in clear, measurable terms. Table II – 1.2 gives a list of verbs to use and those to avoid.

   Unclear: *After instruction, the participant will **know** the groups in the MyPyramid.* (*To know* is not clear, not measurable, i.e. what is expected of the participant to show *knowing*?)
   Clear and measurable: *After instruction, the participant will **list** the groups in the MyPyramid without missing one.*

3. Objectives can be improved by including these three parts. In general, the more that can be specified, the better the objective.

   a. performance – what the learner is able to do after the instruction is completed.
   b. conditions – under what conditions will the performance occur.
   c. criterion – how good the learner's performance must be to be acceptable.
   Example: (1) Using the Daily Food Guide, the participant will plan a menu for one day that is nutritionally adequate.
   (2) Without referring to the diet sheet, the participant will select low fat foods from the menu with no errors.

PART	QUESTION	EXAMPLES
Performance	Learner do what?	(1) Plan a menu for one day (2) Select low fat foods from the menu
Conditions	Under what conditions?	(1) Using the Daily Food Guide (2) Without referring to the diet sheet
Criterion	How well?	(1) Nutritionally adequate (2) With no errors

SOURCE: Mager, R.F. *Preparing Instructional Objectives*, 2nd Ed., Lake Publishing, Belmont, CA 1984.

TABLE II – 1.2 Verbs Describing Performance

Verbs to use:		
Analyze	Discuss	Prepare
Apply	Distinguish	Produce
Assemble	Evaluate	Recall
Calculate	Explain	Recite
Cite	Identify	Recognize
Classify	Illustrate	Recommend
Compare	Interpret	Repair
Complete	List	Select
Construct	Measure	Solve
Contrast	Name	State
Define	Operate	Summarize
Demonstrate	Plan	Use
Describe	Practice	Write
Verbs to avoid:		
Appreciate	Feel	Learn
Believe	Grasp	Like
Comprehend	Hope	Realize
Discern	Know	Understand

ACTIVITY II – 1 Preassessment and Planning

1. List questions you would ask learners in preassessment of their knowledge on:

    (a) Fluids and Health (learners: breastfeeding mothers) (3 points)

    (b) Safe Handling and Cooking Temperatures for Food (learners: employees during in-service training) (3 points)

2. Write one or two measurable performance objectives for each topic in question #1. (3 points)

3. Using information in questions #1 and 2, outline a plan for a 15 minute oral presentation for one of the topics. Write outline on a separate sheet of paper. (11 points)
    Use these two headings: Content and Sequence
    Learning Activities

LESSON II – 2

BASIC SKILLS IN NUTRITION EDUCATION
Implementing and Evaluating

OBJECTIVES:

In this lesson, the student will:

1. Use methods and techniques of educational presentation appropriate for the target group.
2. Evaluate the appropriateness of nutrition education teaching materials for the target group based on background and assessed needs.
3. Develop teaching aids, including a one-page printed handout, to use in a nutrition education oral presentation for a target group.
4. Deliver an oral presentation observing suggested guidelines for effectiveness.
5. Discuss tips for dealing with a hostile audience.
6. Plan methods for evaluating effectiveness of nutrition education presentation.

ASSIGNMENTS:

1. Read Lesson II – 2 *Basic Skills in Nutrition Education: Implementing and Evaluating.*
2. Complete Take-Home Assignment II – 2.
3. Nutrition education project: Submit a lesson plan on the topic selected and approved. Be sure to use acceptable format and apply guidelines discussed in Lessons II – 1 and II – 2.

MATERIALS: Sample lesson plan
Activity work sheet

I. SELECTING AND IMPLEMENTING LEARNING ACTIVITIES

There are many methods the educator can use to turn the objectives of learning into action. These are methods the educator can use to present information to the learners to influence the process of learning. The different methods differ greatly in their effectiveness in helping learners to learn and retain the information presented. The methods, uses, limitations, advantages and disadvantages of each method are given in Table II – 2.1.

The following factors should be taken into consideration in selecting which method will be most effective:

- educational purpose of learning activity,
- needs and preferences of the learner(s),
- size of the group,
- facilities and equipment available,
- time available,
- cost, and
- educator's previous experience or degree of success with the method.

Table II – 2.1 Strengths and Weaknesses of Teaching Methods

	STRENGTHS	WEAKNESSES
Lecture	Easy and efficient Conveys most information Reaches large numbers Minimum threat to learner Maximum control by Instructor	Learner is passive Learning by listening only Formal atmosphere May be dull, boring Not suited for higher level learning in cognitive domain Not suited for manual learning
Discussion Panel Debate Case study	More interesting, thus motivating Active participation Informal atmosphere Broadens perspectives We remember what we discuss Good for higher level cognitive, affective objectives	Learner may be unprepared Shy people may not discuss May get sidetracked More time-consuming Size of group limited
Projects	More motivating Active participation Good for higher level cognitive objective	More time-consuming
Laboratory experiments	Learn by experience Hand-on method Active participation Good for higher level cognitive objectives	Requires space, time Group size limited
Simulation Scenarios In-basket Role playing Critical incidents	Active participation Requires critical thinking Develops problem-solving skills Connects theory and practice More interesting Good for higher level cognitive and affective objectives	Time-consuming Group size limited
Demonstration	Realistic Appeals to several senses Can show a large group Good for psychomotor Domain	Requires equipment Requires time Learner is passive, unless can practice

SOURCE: Holli, B. & Calabrese, R. *Communication and Education Skills for Dietetics Professionals*, 3rd Edition, Williams & Wilkins, Baltimore, MD., 1998.

Studies have shown that the more actively involved the learner is in the learning process, e.g. discussing it or actually doing the activity, the better the retention of information learned. Therefore, as much as possible, the educator should use the method that requires the most active participation of the learner. Studies have shown the following as to what people remember:

10% what they read
20% what they hear
30% what they see
50% what they both see and hear
70% what they say
90% what they both say and do

A. Selecting Which Teaching Aid/Material to Use

The old saying "A picture is worth a thousand words" sums up how helpful a teaching aid is in getting the message across to the learner. Teaching aids, anything that appeals to the senses of sight, sound, taste, smell and touch, are particularly helpful when teaching low-income groups with limited reading ability and ethnic groups who speak little English. After planning what needs to be taught and the needs of the learners, the most appropriate teaching aid can be selected. The types of teaching aids and the advantages and limitations of each are summarized in Table II – 2.2.

B. Preparing and Selecting Written Teaching Materials

Printed materials (handouts) can reinforce information given during individual counseling or group classes. Printed materials also provide something that the learners can refer to later to help them remember the information discussed.

To be effective, the written or printed material should be assessed for readability or grade reading level since some individuals have limited reading skills. The nutrition education materials must be understandable to the target group. Recent immigrants with limited ability in English may need print materials in their native language.

The following are guidelines in preparing or selecting effective printed materials for adults with limited reading skills:

- take into account that an individual's reading level is often 1 to 2 grade levels below the highest grade completed in school, sometimes as much as 5 grades below,
- determine the reading level of the material prepared or selected for appropriateness for the target group. One method to use is the *SMOG Readability Formula* given in Table II – 2.3,
- use illustration along with the written text, (see Table II – 2.4 *Use of Illustrations*),
- break down complex messages /information to simple ones,
- fit information into personal lifestyle of the group,
- use an easy to read type-face (fonts) of size 12 to 14 points, (see table II – 2.5 *Recommended Lettering*), and
- give only one idea at a time, too many ideas become confusing.

Table II – 2.2 Various Types of Teaching Aids

TYPE	USES/ADVANTAGES	LIMITATIONS
A. REAL PRODUCT		
Foods	Realistic Hands-on learning and active participation	Some foods are perishable. May require cooking facilities. Not for groups larger than 15-20.
Food Models	Realistic, colorful Portable, non-perishable Show/estimate portion sizes.	Difficult to see in large Groups
Food Packages	Colorful, eye-catching Inexpensive, realistic Portable Teach "Nutrition Facts" label or ingredient labeling.	Lacks motion Can be overdone unless message is focused.
B. DISPLAY MEDIA:		
Pictures/photographs	Inexpensive Mounted on poster board. Display on bulletin board	Use limited to individual or very small group. Distracting to pass around in groups.
Charts/posters	Inexpensive Portable for short distances	Cannot be seen except in small groups (15-20). Homemade charts maybe overcrowded with content. Get worn with repeated use.
Flip-Charts	Informal, inexpensive	Awkward to carry very far. Cannot be seen in larger groups. Requires good handwriting. Requires practice to write quickly while speaking. Maybe too informal for some purposes.
Chalkboard	Inexpensive Easy to use	Requires attention so that one does not talk to the board. Not good in large groups. Need to have correct spelling and good handwriting.
C. PROJECTED VISUALS & MOVING IMAGES		
Overhead transparencies	Inexpensive Easy to use Can maintain eye contact with the audience. Uses normal room lighting. Can write on them while talking.	In a large, deep room, may not be seen in the back. Easy to overcrowd information. Bulb may burn out; carry an extra.

Slides	Small and easy to carry in trays. Can change the order as needed. Good for both large and small groups.	May be out of order if not checked. May be projected incorrectly if not checked first. With dim room lighting, cannot see audience reaction or some may fall asleep.
Videos	Realistic, enjoyable, dramatic Involves both sight and sound. If it tells a story, people retain it better. Can be viewed repeatedly. Can have emotional impact and help to change attitudes.	May not fit the purpose and objectives. May be expensive. Requires equipment. Complex issues may be misinterpreted unless discussed.
D. PRINTED MEDIA		
Printed handouts	Audience can refer to it later Good when information has to be remembered. Helps person to focus and follow points.	People may never look at it again. Time consuming to prepare.

SOURCE: Modified from Holli, B. and Calabrese, R. *Communication and Education Skills for Dietetics Professionals*, 3rd Edition, Williams and Wilkins, Baltimore, MD., 1998.

TABLE II – 2.3 SMOG Readability Formula

The SMOG formula is useful for shorter materials. To calculate the SMOG reading level, begin with the entire written work that is being assessed and follow these steps:

1. Count off 10 consecutive sentences near the beginning, in the middle, and near the end of the text. If the text has fewer than 30 sentences, use as many as are provided.
2. Count the number of words containing 3 or more syllables (polysyllabic) including repetitions of the same words.
3. Look up the approximate grade level on the SMOG conversion Table.

Total Polysyllabic Word Count	Approximate Grade Level (+1.5 Grades)
0-2	4
3-6	5
7-12	6
13-20	7
21-30	8
31-42	9
43-56	10
57-72	11
73-90	12
91-110	13
111-132	14
133-156	15
157-182	16
183-210	17
211-240	18

When using the SMOG formula:

- A sentence is defined as a string of words punctuated with a period, an exclamation mark, or a question mark. Consider long sentences with a semi-colon as two sentences.
- Hyphenated words are considered as one word.
- Numbers that are written out should be counted. If written in numeric form, they should be pronounced to determine if they are polysyllabic.
- Proper nouns, if polysyllabic, should be counted.
- Abbreviations should be read as though unabbreviated to determine if they are polysyllabic. However, abbreviations should be avoided unless commonly known.

McLaughlin G.Harry. "SMOG Grading: A New Readability Formula." *Journal of Reading*, Vol. 12, No. 8 (May 1969), p. 639-46.

= Table developed by: Harold C. McGraw, Office of Education Research, Baltimore County Schools, Towson, MD.

From Gaston N, Daniels P. *Guidelines: Writing For Adults With Limited Reading Skills*. Washington, DC: US Dept of Agriculture, Food and Nutrition Service, US Government Printing Office; 1989.

C. Giving the Oral Presentation

Part of the day-to-day responsibility of the nutrition paraprofessional includes giving oral presentations or classes to groups of participants or to other employees. Speaking and presentation skills are important to acquire in order to make teaching more effective. Presentation skills cannot be learned by reading alone but must be practiced as often as possible.

The following are suggestions for making oral presentations effective:

1. Know your objectives before planning your talk. What do you want to accomplish? What changes do you want to take place in the attitude or behavior of the listeners? Do not overload the listeners with too much information in the time allotted.

2. Listeners tend to be more attentive when they believe the speaker is able to relate to their situation. Point out any connection you may have with the particular group.

   Example: "Just a year ago. I was a breastfeeding mom," or "I was once 30 pounds overweight myself."

3. Develop rapport or mutual trust with the listeners so that they feel comfortable to ask questions.

4. During the introduction of the topic, the body, or the conclusion of the presentation, let the listeners know how the topic relates to their needs. Try to answer the unspoken question, "What is in this for me?"

5. At the beginning, tell the listeners the points to be discussed. For example: "In our class today, I will discuss three specific points. One, I will discuss why our bodies need calcium; two, food sources of calcium, and three, who needs to take calcium supplements."

6. Use visual aids, handouts, etc. to help the listeners understand the presentation. Transparencies, posters, etc. must be in large print that can be easily read.

7. Give your presentation in an organized way. Generally, the three parts of a presentation include introduction, body, and conclusion.

8. Do not read or memorize your presentation. This quickly becomes boring to listeners. Instead, sound natural and conversational. However, speak <u>more</u> slowly than in a face-to-face conversation. Practice pronouncing words correctly.

9. Keep eye contact with your listeners and respond to their nonverbal feedback, like signs of being bored, confused, etc.

10. Keep hands hanging loosely by the sides to be free to gesture. Avoid holding anything, except for a visual aid or a pointer, since the fingers may start playing with it and not be aware of it.

11. Give the listeners an indication that your presentation is about to end. Example: "Before concluding…," or "To summarize…," etc. Allow time for questions or interaction from the listeners.

12. Never share with your listeners that you are scared, not prepared, or missing a material.

The following are suggestions for dealing with hostile listeners:

1. Emphasize all the things about yourself that you may have in common with the listeners. It is not as easy to attack someone who is similar to them.

2. When listeners express a different opinion, it is best to simply allow it to exist. Never become defensive or try to insist the person is wrong. Just say, "Thank you; it is good to hear someone else's opinion."

3. If you know that many of the listeners are likely to be hostile, you can introduce with comments to discourage some of their remarks. For example, you can focus on those points on which they agree.

II. EVALUATING NUTRITION EDUCATION

Evaluation is the process of measuring the value or worth of something. In terms of nutrition education, evaluation is based on the measurement of what the target group knows, thinks, feels and do that eventually makes them choose healthier food practices, a behavior change. Plans for evaluation should also be made during the planning stages of the nutrition education activity. In general, the purposes of evaluation are: (1) to find out if the process of teaching is effective, (2) to identify strengths and weaknesses, and (3) to determine what changes should be made.

There are two types of evaluation used to improve teaching/learning:

A. *Formative* evaluation – conducted before or during the teaching or learning activity with the purpose of improving teaching or learning by revising plans, methods, techniques, or materials. Example: if the learner appears bored, unsure, or lost the teacher should stop teaching and do a formative evaluation, e.g. ask the learner to repeat what he/she has learned so far. If evaluation shows the learner does not understand, then a different approach should be used, for example, the use of simpler terms to explain, the use of concrete examples or illustrations, or a group member may be able to provide an explanation that the learner understands better.

B. *Summative* evaluation – conducted at the end of the teaching or learning activity with the purpose of measuring its quality or worth. Examples: evaluation by the learners at the end of a nutrition education presentation; grading at the end of the semester.

A follow-up evaluation at 3 to 6 months can also be done to measure if the learner has retained what was learned or what behavior change was made/maintained.

In nutrition and health education, the focus of these two types of evaluation are: knowledge, attitudes or beliefs, and/or behavior.

III. PUTTING IT ALL TOGETHER: THE LESSON PLAN

A lesson plan is a written summary of information about the teaching/learning activity prepared and used by the teacher as a guide. A series of lesson plans may be used together to cover longer periods of teaching/learning activity like a whole day, several days, or a semester.

A lesson plan describes all aspects of the teaching/learning activity which include:

- preassessment or needs assessment,
- performance objectives,
- content outline
- order or sequence the content will be taught/learned,
- learning activities for the learners to reach the objectives,
- instructional methods to be used,
- resource materials, teaching aids, equipment, and facilities needed,
- amount of time allotted or scheduled, and
- method(s) of evaluating whether the learner(s) achieved the objectives.

Table II – 2.6 gives an example of a lesson plan.

Table II – 2.6 SAMPLE LESSON PLAN ON "BUDGETING"

I. Target audience: High school seniors

II. Objectives: Participants will be able to: (1) identify sources of income and types of expenses for one month, (2) prepare a simple budget for one month that meets their needs.

III. Time allotted: 50 minutes

IV. Preassessment: Question participants what they already know about budgeting; who of them keeps a monthly budget now.

V. Content and sequence:
   - **a. Advantages of budgeting**
   - b. Items that make up a budget
   - c. Estimating amount of money received (income)
   - d. Estimating amount of money spent (expenses)
   - e. Analyzing and balancing a budget
   - f. Questions from the participants
   - g. Each participant will prepare a monthly budget

VI. Learning activities: Show an example of a monthly budget. Have each participant prepare a monthly budget. Have each participant analyze his/her budget and write a plan for adjustments that may be necessary.

VII. Materials: Sample of completed monthly budget; form for record of expenses; monthly budget worksheet; handout summarizing steps in preparing a budget.

VIII. Evaluation: A monthly budget prepared by each participant that is workable for him/her.

ACTIVITY II – 2 Evaluating Reading Level

Using the SMOG Readability Formula, determine the approximate grade level of the following material.

Your Baby Equals What You Eat

After your baby is born, the responsibility of feeding can be shared. Even if you elect to breastfeed, a sitter can see to the infant's nutritional needs with a supplementary bottle when you're out at a party. Or daddy can do it if you're down with the flu. During the nine months of gestation, however, you are your baby's only source of nourishment. You can't leave your uterus with a sitter while you're out on the town. Or have daddy pipe in nutrients when your appetite has flown with the flu. Every calorie, every gram of protein, every milligram of vitamin C, every trace of zinc and manganese your baby gets – or needs, and doesn't get – can only come from you. Not from stores in your body, for the most part, since few nutrients can be "saved up" for use by your baby, but from your diet.

In short, your fetus is what you eat – and what you don't eat. As you can probably guess, a baby made up of candy bars and colas is quite different from a baby made up of whole-grain breads and milk. A classic study done at Harvard many years ago and one done more recently in Montreal document this. In the Harvard study, women on poor diets had babies in poor health, women on average diets had babies in average health, and women on excellent diets had babies in excellent health. In Montreal, when nutritional education and supplementation (eggs, milk, oranges, and a vitamin/mineral supplement) were given to women who, because of poor diet and socioeconomic factors, were in a high-risk category, the rate of pregnancy complications, including stillbirths, perinatal mortality, and neonatal mortality dropped significantly – to a level lower than that in the rest of Canada.

Studies of women living under famine conditions point to a lower average birth weight for their babies and an increase in the incidence of miscarriages, stillbirths, neonatal deaths, and malformations. You aren't likely to be exposed to famine conditions, but nevertheless, what you eat or don't eat, will have tremendous impact on your baby:

Birth weight. Eating too little, or eating the wrong kinds of food, can keep your baby from growing; eating too much can make your baby grow too much. Two generations ago, to make delivery easier, doctors deemed it wise to limit the size of the baby by limiting caloric intake. We now know that babies who are small for the amount of time they've been in the uterus (small for gestational age) are far more subject to postnatal physiological problems than normal weight babies. But, very large babies can complicate delivery.

Ideally, your baby should weigh in somewhere between 6-1/2 and 8-1/2 pounds at birth. You can't control your fetus' weight gain by putting him on the scale every morning, but your getting on the scale every morning can help. So can monitoring your food intake for quality as well as quantity. Twenty pounds gained on the Best-Odds Diet can result in a bouncing 7-pound baby, while 50 gained on junk food can turn out a baby under five.

Miscarriage. In the first trimester, when cells begin differentiating into tiny organ systems, quality of food (nutrients) is more important than quantity (calories). Severe early deprivation of nutrients can result in fetal damage, and an impaired fetus is often spontaneously aborted (miscarried) from the uterus. Fortunately, this kind of damage is rare on the typical American diet. Still, the earlier in pregnancy you start eating well, the better.

Organ development. During the early months of gestation, your baby's tiny heart, liver, lungs, kidneys, nervous system, and other organs are developing at a remarkable rate. The raw materials for this busy little organ factory are supplied by you through the rapidly growing placenta. Most of them come directly from what you eat. Certain nutritional deficiencies are known, or believed, to cause specific malformations.

DISCUSSION QUESTION: What is the grade reading level and why?

Take-Home Assignment II – 2

Get a sample of a teaching or informational material at least one page long, e.g. handout, brochure, pamphlet, or booklet. Evaluate the effectiveness of the material for its target audience in regard to the following: (20 pts)

Expected target audience:

1. Reading level:

2. Use of illustrations/pictures:

3. Type and size of lettering:

4. Overall, do you think the material is effective for its target audience?

5. What item/s would you change to make it more effective?

LESSON III

COMMUNITY NUTRITION PROBLEMS

OBJECTIVES:

In this lesson, the student will:
1. Identify major nutrition-and diet-related public health problems.
2. Discuss the different levels of prevention in addressing nutrition-related problems.
3. Identify the community agencies that offer resources to people with specific nutrition-related problem(s).
4. Enumerate the nutrition objectives in *Healthy People 2010* and give examples of work being done toward these objectives.
5. Examine factors that affect dietary behavior change.

ASSIGNMENTS:
1. Read Lesson III *Community Nutrition Problems* in student manual.
2. Review background information on nutrition-related problems in *Nutrition for Health and Health Care*.
3. Read and be prepared to answer discussion questions.

MATERIAL: Discussion questions

A *nutrition problem* is defined as a condition that results from the harmful effects of malnutrition, along with other factors of healthful living, on an individual, a group, or a population.

There are four sources of information about nutrition problems in a specific community or in a country. These four sources and the specific information each provides that help identify the problem(s) include:

1. Nutritional status surveys – provide information on the nutritional health of specific population groups at a particular point in time. Examples: The National Health and Nutrition Examination Survey (NHANES I, II and III) conducted by the U.S. Department of Health and Human Services (DHHS).

2. Morbidity and mortality statistics – show the extent that nutrition-related conditions and diseases occur. This information is available from the National Center for Health Statistics (NCHS), or the state and local health agencies.

3. Food consumption surveys-give information on the adequacy, appropriateness and trends in food consumed. Examples: National Food Consumption Surveys conducted by the U.S. Department of Agriculture (USDA).

4. Information about contributing conditions and practices such as poverty, indifference, ignorance and misinformation. This information is collected along with the food consumption surveys and the nutrition status surveys.

I. COMMUNITY NUTRITION PROBLEMS

Information available show convincing data that different aspects of diet and nutrition are related to some of today's serious and costly health problems. These problems fall into three categories based on their relationship to diet and nutrition.

A. Problems clearly associated with nutritional status:

- obesity,
- iron deficiency anemia,
- growth retardation, and
- dental caries

B. Problems in which diet is a contributing risk factor:

- low birth weight,
- birth defects and inborn metabolic errors,
- heart disease,
- hypertension,
- stroke,
- osteoporosis, and
- cancer, some types.

C. Problems in which diet contributes to treatment and control:

- acquired immune deficiency syndrome (AIDS),
- diabetes mellitus,
- gastrointestinal diseases, and
- kidney disease

NOTE: Student should review background information, with emphasis on risk reduction and treatment, on the above nutrition-related problems.

II. LEVELS OF PREVENTION IN PUBLIC HEALTH AND NUTRITION

Public health efforts targeted toward a community health or nutrition problem usually consist of many agencies, both public and private, working together toward a solution. In most cases, the approach to the problem occurs at three levels of prevention:

A. *Primary* prevention or health promotion – includes efforts to change the environment and the community, as well as family and individual life styles and behaviors to promote and maintain health. Primary prevention efforts targeted at the whole population throughout the various stages of life are accomplished through the food distribution system, the media, the schools, work sites, recreation centers, clubs, or social groups.

B. *Secondary* prevention – involves risk appraisal and reduction. Those identified to be more likely to develop a health/nutrition problem because of their family history, life style, environment or age are targeted for secondary prevention programs. Secondary prevention efforts include screening, detection, early diagnosis, treatment and follow-up before the disease progresses to show clear-cut symptoms. These services are offered by public health agencies or private health care practitioners.

C. *Tertiary* prevention – aims to treat and rehabilitate persons with diagnosed health problems in order to prevent or delay their pain, suffering, disability, or premature death. This level of prevention is part of the medical care provided more commonly by hospital inpatient and outpatient facilities, ambulatory health care centers, and private practitioners.

III. HEALTHY PEOPLE 2010

What is Healthy People 2010? http://www.healthypeople.gov/

Healthy People 2010 is a comprehensive set of health objectives for the nation to achieve over the first decade of the new century. Released by the Department of Health and Human Services (DHHS), Office of Disease Prevention and Health Promotion and created by scientists both inside and outside of government, it identifies a wide range of public health priorities and specific, measurable objectives.

Healthy People 2010 sets forth two overall goals for the health of Americans:

- Increase quality and years of healthy life
- Eliminate health disparities

The nation's progress in achieving these two goals will be monitored through 467 objectives in 28 focus areas. There are 18 objectives under the focus area of *Nutrition and Overweight.* Table III-1 summarizes the 18 nutrition/overweight objectives.

TABLE III – 1 National Nutrition-Related Objectives in *Healthy People 2010*

Weight Status and Growth

1. *Healthy weight in adults*. Increase the proportion of adults who are at a healthy weight to 60%. Baseline: 42% of adults aged 20 years and older were at a healthy weight (defined as BMI equal to or greater than 18.5 and less than 25) in 1988-94.

2. *Obesity in adults.* Reduce the proportion of adults who are obese to 15%. Baseline: 23% of adults aged 20 years and older were identified as obese (defined as a BMI of 30 or more) in 1988-94.

3. *Overweight or obesity in children and adolescents.* Reduce the proportion of children and adolescents who are overweight or obese as follows: for children aged 6 to 11 years and adolescents aged 12 to 19 years to 5% from a 1988-94 baseline of 11%.

4. *Growth retardation in children.* Reduce growth retardation among low-income children under age 5 years to 5 %. Baseline: 8% of low-income children under age 5 years were growth retarded in 1997(defined as height for age below the 5th percentile in NCHS/CDC growth charts).

Food and Nutrient Consumption

5. *Fruit intake.* Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit to 75%. Baseline: 28% of persons aged 2 years and older consumed at least two daily servings of fruit in 1994-96.

6. *Vegetable intake.* Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables , with at least one-third being dark green or orange vegetables to 50%. Baseline: Only 3% of persons aged 2 years and older consumed at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables in 1994-96.

7. *Grain product intake.* Increase the proportion of persons aged 2 years and older who consume at least 6 daily servings of grain products, with at least three being whole grains to 50%. Baseline: 7% of persons aged 2 years and older consumed at least six daily servings of grain products, with at least three being whole grains in 1994-96.

8. *Saturated fat intake.* Increase the proportion of persons aged 2 years and older who consume less than 10% of calories from saturated fat to 75%. Baseline: 36% of persons aged 2 and older consumed less than 10% of calories from saturated fat in 1994-96.

9. *Total fat intake.* Increase the proportion of persons aged 2 years and older who consume no more than 30% of calories from total fat to 75% from 33 % in 1994-96.

Table III-1 continued

10. *Sodium intake.* Increase the proportion of persons aged 2 years and older who consume 2,400 mg. or less of sodium daily to 65%. Baseline: 21% of persons aged 2 years and older consumed 2,400. mg. or less of sodium daily (from foods dietary supplements, tap water, and table salt) in 1988-94.

11. *Calcium intake*. Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium to 75% from 46% of persons who met the approximated mean calcium requirements (from foods, dietary supplements, and antacids) in 1988-94.

Iron Deficiency and Anemia

12. *Iron deficiency in young children and in females of childbearing age.* Reduce iron deficiency among young children and females of childbearing age to the following targets:

Children aged 1 to 2 years:	5%	from a baseline of 9%.
Children aged 3 to 4 years:	1%	from a baseline of 4%
Nonpregnant females aged 12 to 49 years:	7%	from a baseline of 11%

13. *Anemia in low-income pregnant females.* Reduce anemia among low-income pregnant females in their third trimester to 20% from a baseline of 29% (defined as hemoglobin less than 11 g/dl) in 1996

14. *Iron deficiency in pregnant females.* (Developmental) Reduce iron deficiency anemia among pregnant females.

Schools, Worksites and Nutrition Counseling

15. *Meals and Snacks at school.* (Developmental). Increase the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality.

16. *Worksite promotion of nutrition education and weight management*. Increase the proportion of worksites that offer nutrition or weight management classes or counseling to 85%. Baseline: 55% of worksites with 50 or more employees offered such classes or counseling through their health plans in 1998-99.

17. *Nutrition counseling for medical conditions.* Increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition to 75% from 42% in 1997.

Food Security

18. *Food Security.* Increase food security among U.S. households to 94% and in so doing reduce hunger. Baseline: 88% of all U.S. households were food secure in 1995.

SOURCE: *Healthy People 2010:* Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, Washington, D.C., 2000

A. Work to Achieve *Healthy People 2010* Objectives

Federal, state, and local governments, professional and community organizations, schools, work sites, and voluntary agencies are all working together on programs and activities to achieve the objectives. Most nutrition professionals and paraprofessionals work in programs and ongoing activities to achieve the objectives of *Healthy People 2010.* Examples of projects/activities to help achieve the objectives include:

- MyPyramid www.mypyramid.gov
  Food guidance system released in 2005 to replace the Food Guide Pyramid. It serves as a guide to daily food choices.

- Fruits & Veggies – More Matters (formerly Five-A-Day Campaign) http://www.fruitsandveggiesmatter.gov/

The CDC has updated its fruits and vegetables Web site to reflect the new Fruits & Veggies-More Matters campaign, which takes the place of the 5 A Day program. The Centers for Disease Control and the Produce for Better Health Foundation (PBH) have partnered with many other organizations to launch the public health initiative **Fruits & Veggies – More Matters.**

- Dietary Guidelines for Americans
  Serves as a guide for healthy Americans intended to address the common nutrition-related health problems of chronic disease. The latest revision was released in 2005.

- Programs for women and children
  Funded programs such as Women, Infants, and Children (WIC) Supplemental Nutrition Program and Headstart have made considerable improvements in children's health but undernutrition still exists in low income and minority groups.

- Nutrition Labeling
  Food labels on most foods must conform to the requirements of the Nutrition Labeling and Education Act of 1990 and provide mandatory information. The new food labels were designed to increase consumer's knowledge about food content/ingredients to help choose healthier foods.

- Nutrition Program for Older Americans (Title III – C)
  The Older Americans Act provides a national network of social services for older adults. Title III – C funds provide congregate and home-delivered meals as well as supportive services to older adults.

- National Nutrition Monitoring

  The National Nutrition Monitoring and Related Research Act of 1990 has as its primary goal to establish a comprehensive national nutrition monitoring and related research program for the federal government to insure a coordinated
  and timely collecting, reporting, analyzing and exchanging of nutrition monitoring activities.

III. FACTORS INVOLVED IN DIETARY BEHAVIOR CHANGE

Work in the field of nutrition involves changing eating behavior(s) that puts the individual or community at risk for nutrition-related problems. In order to be effective as dietary change agents, nutrition practitioners must understand the many complex factors that influence people to choose the foods they eat.

Food choices are developed starting in infancy and molded by the child's experiences relating to feeding and mealtimes. Food choices are influenced by parents' tastes and education, cultural/ethnic practices and traditions, family's food budget, shopping, cooking and eating habits. Knowledge and awareness about nutrition and health or disease prevention compete as one influence but most often not a very strong one.

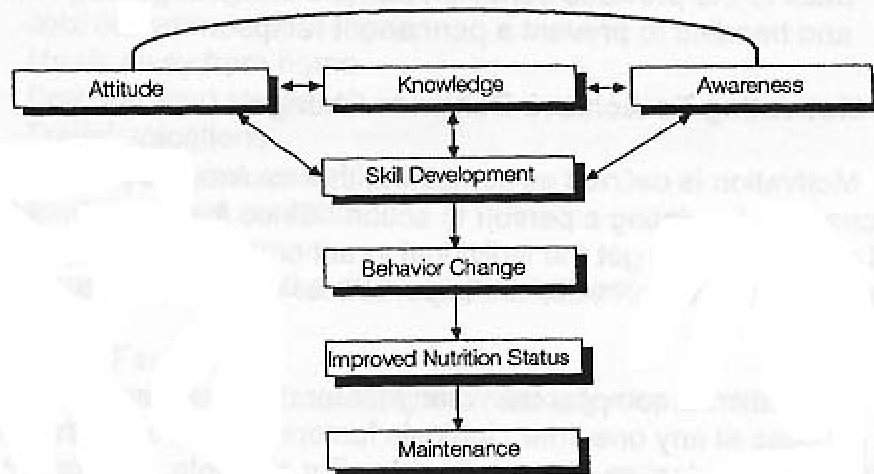
The many different factors that influence food choices are the reasons why people find it very difficult to follow dietary changes even when the benefits are clearly explained to them. Changing food choices must proceed in small, gradual steps in order for them to become life-long behavior changes. In order to be successful, people must commit themselves to achieve long term goals.

A. Changing Dietary Behavior

The steps in changing dietary behavior outlined by Kaufman, M. are given in Figure III – 1 and described here. The steps may occur in different order but the more complete each step, the greater the chance the behavior change will be maintained.

- Attitudes – people must believe that they can take charge of their own health and control what they eat; must be open to try new foods and new methods of preparing/cooking them.

- Awareness – people must understand the role of nutrition or diet in promoting health and preventing disease through risk reduction; their own health status, health risks, and individual dietary needs.



- Knowledge – people must understand the reasons for the changes recommended. The nutrition practitioner should explain the scientific bases for the changes at a level that can be understood. For some people, this knowledge encourages them to make changes. However, for most, knowledge alone does not lead to a change in behavior.

- Skill development – people must be able to do things that will enable them to make and maintain new eating habits. These include skills in selecting appropriate foods at the supermarket, budgeting to increase food buying power, growing fruits and vegetables, preparing foods with less fat, sugar, and salt, selecting appropriate foods when eating out, etc. In helping people develop skills, the nutrition practitioner starts by examining the factors that influence their eating behaviors and identifying the skill(s) that would be most useful. Example: An individual who eats out a lot would need more guidance in selecting and ordering appropriate foods from restaurants than in choosing foods in the supermarket.

- Behavior change – this step can be accomplished by:
  1) keeping track of food intake/eating habits to identify problems,
  2) setting realistic objectives, making contracts,
  3) avoiding occasions or things that lead to inappropriate food choices and substituting desired behaviors,
  4) expecting temptations or difficult situations and rehearsing ways to handle them,
  5) learning to overcome failure and to revise goals, and
  6) rewarding successes no matter how small.

- Promoting and maintaining nutritional health – with a change to healthy eating behaviors, desired changes in health such as decreased weight, normal blood values, or improved blood pressure can be achieved but may take a long time to show these results. Improvements in health will help the individual to maintain the behavior change. However, if the individual slips back to the previous behavior, barriers that brought it on should be accepted and handled to prevent a permanent relapse.

B. Motivating To Achieve Behavior Change

Motivation is defined as something that causes the person to act or the process of stimulating a person to action. Since the goal of nutrition counseling and education is to get the individual to act on changing food practices/eating behaviors, motivation skills are important for nutrition educators or practitioners to have.

Motivation is complex with many factors, both *intrinsic* and *extrinsic*, affecting the process at any one time. Intrinsic factors come from within the individual and his/her needs, desires, drives or goals. For example, a pregnant woman may be *intrinsically* motivated toward healthier eating practices to have a healthy baby. Extrinsic factors may either help to increase motivation (example: praise or reward) or may decrease motivation (example: family or friends who offer poor food choices).

As mentioned earlier, an individual's knowledge of what to eat does not bring about a change in food choices/practices but serves as an instrument when the individual is ready to make the change. The factors that motivate change in food choices are*:

1. <u>Motivational Factors That Help Promote Proper Food Choices</u>

a. Intrinsic factors:
Beliefs about health and nutrition
Positive thoughts
Goal setting, action plans
Contracting
Self-monitoring and management

b. Extrinsic factors:
Praise, positive feedback, recognition
External rewards
Support of family, friends, co-workers, counselor
Models of proper behavior
Availability of healthy food
Unavailability of improper food
Physical activity

2. Motivational Factors That Conflict with Proper Food Choices

Family and cultural practices
Social occasions: parties, dinners, movies, birthdays, etc.
Time: time of day, day of week, lack of time, holidays
Negative thoughts
Job, co-workers
Meals away from home
Entering food stores
Travel, vacations
Proper food not available
Improper food available
Physical environment
Characteristics of the diet: complexity, cost

3. Other Factors:

Emotional states: boredom, fear, anxiety, depression, happiness
Stress
Weather
Physical condition: threat to health, fatigue or rested, state of health, severity of illness.

*SOURCE: Holli, B. and Calabrese, R. *Communication and Education Skills for Dietetics Professionals*, 3rd Ed., Williams and Wilkins, Baltimore, MD, 1998, page 123

Group Discussion & Activity

1. Give examples of primary prevention nutrition-related activities you can hold in the community. (9 points)

   Identify the following:
   a) Where the activity will be held:

   b) Target audience:

   c) Objective of the activity:

   d) Learning activities

2. E.W. is a 24-year old computer worker. Lately, she noticed that her clothes were getting tighter; her weight today was 20 lbs. more than she has ever weighed before. She consulted a registered dietitian.

   The dietitian in discussing the problem with E.W. found out the following scenario: E.W. usually rushes off to work in the morning without breakfast but stops to pick-up something to eat in the car at a fast-food place. For lunch, she may send for a take-out or eat out with co-workers. When she gets home from work, she's "starving" so she grabs a snack. Then, she has a glass of wine with her husband when he arrives to talk about their day while dinner is cooking. After dinner and housework, they watch TV and munch on a snack. (6points)

   a. List the cues (signals) that make E.W. want to eat.

   b. How can each be changed or removed to help her lose weight?

   c. What rewards (other than food) can be planned for her?

LESSON IV

COMMUNITY NUTRITION PROGRAMS & SERVICES

OBJECTIVES:

In this lesson, the student will:

1. Identify economic, social and environmental factors that increase nutritional risk in communities, families or individuals.
2. Describe the target groups and services provided by food assistance and nutrition programs.
3. Describe how to access various social services, feeding, health education, and advocacy programs in the community.

ASSIGNMENTS:
1. Read Lesson IV *Community Nutrition Programs and Services* in student manual
2. Be prepared to do Activity IV

MATERIALS:
Activity work sheet
Video tapes: *Welcome to WIC*.
Coming of Age: A Guide to Senior Services.

I. FACTORS THAT PUT COMMUNITIES AT RISK

A combination of biological, economic, environmental, and social factors increases nutritional risk in communities, families or individuals. In this lesson, the economic, environmental, and social factors are discussed; biological factors are discussed in another course.

Economic, social, and environmental factors that contribute to nutritional risk include:

A. Poverty

Each year, poverty income guidelines are established by the federal government. They are designed to show the income that would define a state of poverty for a family composed of a specified number. The guidelines are used as basis for eligibility for various federal programs, in some cases, along with other supplemental data. Table IV – 1 shows the 2007 Federal Poverty Guidelines for the 48 Contiguous States and the District of Columbia.

The U.S. Census Bureau data shows that 35.7 million Americans or 14.2% of the US population lived in poverty in 1991, representing the highest number of Americans in poverty since 1964. Poverty leaves little or no money to purchase food and other essentials. Many of those in poverty are children, the elderly, black Americans, and Hispanics.

B. Unemployment and Underemployment

Many of poor families have at least one member working full-time but do not earn enough to get them out of poverty. There are also the new poor like workers who lost their jobs and become unemployed for long periods of time and their unemployment benefits run out as well as their savings, loans, etc.

C. Lack of education and/or job skills and illiteracy

Close to 20% of adult Americans (one out of every five) have reading skills below the fifth grade level and lack the literacy to function effectively in today's society. Most jobs require basic skills in reading, writing, and mathematics and people with limited literacy do not qualify. For these people, a cycle of inadequate education, unemployment, and poverty is quite common.

Immigrants who have limited literacy in their own language will have an even more difficult time to learn English well enough to communicate adequately to enable them to find jobs.

Nutrition education materials for these groups must be planned around the group's ability to speak, read, write, and understand English.

D. Cultural or language barriers

New immigrants and refugees need guidance and support as they get established in their new land. They encounter many cultural barriers such as unfamiliar choice of foods, large supermarkets, high prices and limited availability of their traditional foods, etc. Immigration or citizenship status and lack of adequate language skills affect their ability to find jobs with adequate pay or even finding work at all. Those who are undocumented may not follow through with referrals to government assistance programs for fear of deportation. Their fears, concerns and need for confidentiality must be respected.

E. Housing and Homelessness

Lack of affordable housing is the major cause of homelessness particularly in those who must live on a fixed income, limited budget, or public assistance allowance. In recent years, there has been a significant increase in requests for emergency shelter. About one-third of the homeless population are families with children. Those who are homeless are very likely to be hungry, too. Nutrition practitioners must support efforts to improve the availability of nutritious food for the homeless whether they live on the streets, in hotels, motels, or shelters.

F. Hunger

Hunger has harmful effects at any age but it is especially harmful to the health of pregnant women, infants and children, and the elderly. Some of the negative effects of hunger on health include low birth weight, increased infant mortality, retarded growth, iron deficiency anemia, and other indicators of malnutrition.

Even in the United States, hunger is a real problem. It is estimated that about 20 million people, more than half of them children, are chronically undernourished. At present, there are food assistance programs aimed to remedy hunger and prevent malnutrition. These programs will be discussed in the next section.

G. Geographic or social isolation

People who live in remote areas without their own transportation or access to public transportation may not be able to obtain adequate food at affordable prices or not able to use food assistance or health care programs/services.

People who isolate themselves from any relationships with their families or community may also prevent themselves form seeking health care, food, housing or financial assistance.

2008 HHS Poverty Guidelines:

Persons in Family or Household	48 Contiguous States and D.C.	Alaska	Hawaii
1	$10,400	$13,000	$11,960
2	14,000	17,500	16,100
3	17,600	22,000	20,240
4	21,200	26,500	24,380
5	24,800	31,000	28,520
6	28,400	35,500	32,660
7	32,000	40,000	36,800
8	35,600	44,500	40,940
For each additional person, add	3,600	4,500	4,140

SOURCE: *Federal Register*, Vol. 73, No. 15, January 23, 2008, pp. 3971–3972, http://aspe.hhs.gov/poverty/08poverty.shtml

II. FOOD AND NUTRITION PROGRAMS FOR THOSE AT RISK

Many federal food assistance and nutrition programs are in effect in the United States to help solve the problem of hunger and malnutrition. Unfortunately, these programs serve only a small fraction of those who are eligible.

TABLE IV – 2 Food and Nutrition Program Income Eligibility Guide

This table is a guide and does not guarantee a client's acceptance into any program. If a household is at or below the poverty level listed in the left column, it may be eligible for the assistance programs listed in the right column. In many programs, factors other than income are also considered to determine eligibility. The Child Care Food Program guidelines vary according to the sponsor and are not included.

Percentage of Federal Poverty Income Guidelines* (%)	Food and Nutrition Assistance Programs
100	WIC, Free School Breakfast, Free School Lunch, Summer Food Service for Children, Food Stamps (net income), TEFAP, EFNEP, Head Start, CSFP
125	WIC, Free School Breakfast, Free School Lunch, Summer Food Service for Children, Food Stamps (gross income), TEFAP, EFNEP, CSFP
130	WIC, Free School Breakfast, Free School Lunch, Summer Food Service for Children, Food Stamps (gross income), TEFAP, CSFP
150	WIC, Reduced Price School Breakfast, Reduced Price School Lunch, Summer Food Service for Children, TEFAP, CSFP
185	WIC, Reduced Price School Breakfast, Reduced Price School Lunch, Summer Food Service for Children, CSFP
No income standard	Congregate and Home-Delivered Meal Programs for the Elderly

*Federal poverty income guidelines are published each year in the *Federal Register* by the Department of Health and Human Services. See Table IV – 1.

Source: Adapted from *Community Food Resources for Families: An Eligibility Guide* by C. Grandon, Massachusetts Department of Public Health, Office of Nutrition, Boston, Massachusetts, January 1988.

(Table IV-2 shows the maximum allowable incomes for federal program eligibility). Local agencies and churches have started programs in communities to supplement federal programs and reach those who are still in need of food. Examples include food banks, community-based soup kitchens and shelters.

A. Federally Funded Food and Nutrition Programs

Federal food assistance and nutrition programs fall into three groups based on their primary purpose:

1. Food and Nutrition Programs

The main purpose of these programs is to provide food security. Food security is a condition in which people have access to nutritionally adequate food at all times through the usual food distributors.

- Commodity Supplemental Food Program (CSFP)
- Food Stamp Program
- Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- Temporary Emergency Food Assistance Program (TEFAP)
  Also, food banks at the local level.

2. Meals Program

These programs provide nutritious meals to a defined target group. The meals served must meet specific nutritional requirements to qualify for federal funds.

- National School Lunch Program
- School Breakfast Program
- Summer Food Service Program for Children
- Child Care Food Program
- Special Milk Program
- Meal Program for the Elderly (Senior Nutrition Program)

3. Nutrition Education Programs

These programs were established primarily to provide education and training to consumers in food and nutrition. It should be noted that some of the food and nutrition and meals programs also provide nutrition education as part of their primary service(s).

- Cooperative Extension: Expanded Food and Nutrition Education Program (EFNEP)
- Head Start

Refer to Table IV – 3A-D for a description of *Federally Funded Food and Nutrition Programs.*

B. Reaching Out to Those at Risk

As mentioned earlier, only a small proportion of those who are eligible for the food and nutrition programs are actually utilizing these services. Many of those at risk or in need are not aware of these programs, their eligibility requirements, or their application process. Some who are eligible feel there is a negative attitude toward the use of government assistance programs.

Nutrition professionals and paraprofessionals must reach out to those at risk who could benefit from these programs by:

- becoming familiar with eligibility requirements and application procedures to help eligible individuals or families apply,
- participating in outreach activities to inform potentially eligible individuals or families about these programs,
- being sensitive to the feelings of embarrassment in receiving government assistance and helping in breaking down negative stereotypes of people on assistance,
- making application forms and procedures easier and simpler,
- arranging for representatives of the programs to come on a regular basis to busy clinics or health centers to enroll eligible participants at a one-stop location, and
- scheduling service hours so that participants do not need to take time off from work to receive services.

III. REFERRAL TO PROGRAMS AND SERVICES

The following resource gives information to providers on where to get the help individuals and families need to become self-sufficient. These needs may include housing, food, employment, basic health care, and financial help.

- *San Francisco Food, Nutrition & Agriculture Directory (2008) at http://www.sfdph.org/dph/files/MCHdocs/FeelingGood/FNAD_interactivepgs102008.pdf*

ACTIVITY IV - Food Assistance Programs

Read the following hypothetical families. Using Tables IV-1, IV-2 and IV-3A-D, determine which food assistance programs they are eligible to receive based on their income. (10 points)

1. Mr. R.T. is a school custodian with an annual gross salary of $23,750 and no other source of income. He finds it increasingly more difficult to support his wife and two children, ages 7 and 4 years old.
   a) List the food and nutrition assistance programs you can refer him to. Also, list any other criteria that must be met to be eligible for each program.

b) Can his 4 year-old attend a Head Start Program? Explain why or why not.

2. Since being widowed, Mrs. E.D. had to borrow money from relatives to help support her 8 children, ages 17 to 3 years on their total household yearly income of $37,185. List the food and nutrition assistance programs you can refer her for help.