

# Component III: Clinical

## Module F: Nutrition

### Topic 1: Basic Nutrition

#### Statement of Purpose

To prepare the learner with basic knowledge and skills necessary to be able to assess and educate patient on nutritional diet.

#### Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define key terms.
2. Discuss the body's need for food and fluids.
3. List common nutrients and their food sources.
4. Describe the food pyramid and recommended food intake.
5. Describe the vegan basic four food groups.
6. Discuss special nutritional needs of the elderly.
7. Discuss special nutritional needs of the infant, toddler, school age child and adolescents

#### Terminology

- |                       |                |
|-----------------------|----------------|
| 1. Carbohydrate (CHO) | 7. Minerals    |
| 2. Dehydration        | 8. Nutrition   |
| 3. Edema              | 9. Protein     |
| 4. Lipids (fats)      | 10. Vegetarian |
| 5. Fiber              | 11. Vitamins   |
| 6. Force fluids       |                |

#### References

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2. Dennerll, J.T., & Davis, P.E. (2010). *Medical Terminology: A Programmed Systems Approach* (10<sup>th</sup> Ed.). Clifton Park, NY: Delmar, Cengage Learning.
3. Kronenberger, J., Southard D. L., & Woodson, D. (2012). *Comprehensive Medical Assisting* (4<sup>th</sup> Ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
4. Blesi, M., Wise, B.A., & Kelley-Arney, C, (2012) *Medical Assisting Administrative and Clinical Competencies* (7<sup>th</sup> Ed.) Clifton Park, NY: Delmar, Cengage Learning.
5. Lindh, W., Pooler, M., Tamparo, C. & Dahl, B., (2013). *Comprehensive Medical Assisting Administrative and Clinical Competencies* (5<sup>th</sup> Ed.). Clifton Park, NY: Delmar, Cengage Learning.
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7. French, L.L., & Fordney, M.T. (2013). *Administrative Medical Assistant* (7<sup>th</sup> Ed.) Clifton Park, NY: Delmar, Cengage Learning.
8. Booth, K.A., Whicker, L.G., Wyman, T.D., & Moaney-Wright, S. (2011). *Medical Assisting: Administrative & Clinical Competencies with Anatomy and Physiology*. (4<sup>th</sup> Ed.). New York, NY: McGraw-Hill Company, Inc.

9. Proctor, D. B., & Young-Adams, A. P. (2011). *Kinn's The Medical Assistant: An Applied Learning Approach* (11<sup>th</sup> Ed.). Philadelphia, PA: Saunders Elsevier.

**Websites**

1. <http://www.healthychildren.org>
2. <http://www.choosemyplate.gov>
3. <http://www.mypyramid.org>

Content Outline/Theory Objectives	Suggested Learning Activities
<p><b>Objective 1</b>  <b>Spell and define key terms.</b></p> <ul style="list-style-type: none"> <li>A. Review the terms listed in the terminology section.</li> <li>B. Spell the terms listed accurately.</li> <li>C. Pronounce the terms correctly.</li> <li>D. Use the terms in their proper context.</li> </ul>	<ul style="list-style-type: none"> <li>A. Games: word searches, crossword puzzles, Family Feud, Jeopardy, bingo, spelling bee, hangman and Concentration.</li> <li>B. Administer vocabulary pre-test and post-test.</li> <li>C. Discuss learning gaps and plan for applying vocabulary.</li> </ul>
<p><b>Objective 2</b>  <b>Discuss the body's need for food and fluids.</b></p> <ul style="list-style-type: none"> <li>A. The body depends upon foods and fluids to function properly <ul style="list-style-type: none"> <li>1. Provide energy for daily living and bodily functions.</li> <li>2. Promote growth and repair of tissue.</li> <li>3. Provide the necessary substances for regulation of bodily functions.</li> </ul> </li> <li>B. Nutrition is the study of taking nutrients into the body and how the body uses them. Nutrition includes ingestion, digestion, absorption, and metabolism of food <ul style="list-style-type: none"> <li>1. A balanced diet is essential for optimum health.</li> <li>2. A balanced diet is composed of sufficient nutrients to meet the body's requirements.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> </ul>
<p><b>Objective 3</b>  <b>List common nutrients and their food sources.</b></p> <ul style="list-style-type: none"> <li>A. Nutrients are essential components of a balanced diet.</li> <li>B. Common food sources of nutrients <ul style="list-style-type: none"> <li>1. Carbohydrates <ul style="list-style-type: none"> <li>a. Grains</li> <li>b. Pastas</li> <li>c. Rice</li> <li>d. Breads</li> <li>e. Cereals</li> <li>f. Fruits</li> <li>g. Vegetables</li> </ul> </li> <li>2. Proteins <ul style="list-style-type: none"> <li>a. Eggs</li> <li>b. Milk</li> <li>c. Meat</li> <li>d. Fish</li> <li>e. Nuts</li> <li>f. Beans</li> <li>g. Poultry</li> </ul> </li> <li>3. Lipids (fats) <ul style="list-style-type: none"> <li>a. Oils</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Provide students with pictures and/or fake food products and ask them to classify into carbohydrates (CHO), Fats and Proteins.</li> <li>D. After classifying foods, ask students to list whether each food provides fats, oils, types of vitamins, minerals or dietary fiber.</li> <li>E. Have students explain the body's need for each food they classify.</li> </ul>

<ul style="list-style-type: none"> <li>b. Cream</li> <li>c. Cheese</li> <li>d. Meat, fats</li> <li>e. Butter</li> <li>4. Vitamins <ul style="list-style-type: none"> <li>a. Vegetables</li> <li>b. Fruits</li> <li>c. Milk</li> </ul> </li> <li>5. Minerals <ul style="list-style-type: none"> <li>a. Eggs</li> <li>b. Dried fruit</li> <li>c. Potatoes</li> <li>d. Fish</li> <li>e. Milk</li> </ul> </li> <li>6. Fiber <ul style="list-style-type: none"> <li>a. Raw fruits</li> <li>b. Vegetables</li> <li>c. Whole grains</li> </ul> </li> <li>7. Fluids <ul style="list-style-type: none"> <li>a. Water</li> <li>b. Juices</li> <li>c. Other beverages</li> </ul> </li> </ul>	
<p><b>Objective 4</b>  <b>Describe the food pyramid and recommended food intake.</b></p> <ul style="list-style-type: none"> <li>A. The amount of food from the Protein Foods Group you need to eat depends on age, sex and level of physical activity. Use lean protein.</li> <li>B. Switch to fat-free or low-fat (1%) calcium milk and dairy products.</li> <li>C. Make half your plate fruits and vegetables.</li> <li>D. Make at least half of your grains whole grains.</li> <li>E. Oils come from many different plants and from fish. Oils are NOT a food group, but they provide essential nutrients. Therefore, oils are included in USDA food patterns.</li> <li>F. <i>Choose My Plate</i> illustrates the five food groups that are the building blocks for a healthy diet. It uses a familiar image—a place setting for a meal.</li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Have students go to the USDA Website <a href="http://www.choosemyplate.gov/">http://www.choosemyplate.gov/</a> to create their own food plan using <i>Choose My Plate</i>.</li> </ul>
<p><b>Objective 5</b>  <b>Describe the vegan basic four food groups.</b></p> <ul style="list-style-type: none"> <li>A. Whole grains (5 or more servings/day).</li> <li>B. Vegetables (3 or more servings/day).</li> <li>C. Fruits (3 or more servings/day).</li> <li>D. Legumes (2-3 servings/day).</li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Create cards of family groups. <ol style="list-style-type: none"> <li>1. Family of four with one boy (10 years old) who is overweight</li> <li>2. One single mom and a fourteen year old girl who has declared herself to be a vegan</li> </ol> </li> </ul>

	<p>D. Ask groups of four to create a four day diet that demonstrates their understanding of balanced nutrition.</p>
<p><b>Objective 6</b>  <b>Discuss special nutritional needs of the elderly.</b></p> <ul style="list-style-type: none"> <li>A. Fewer calories may be needed if patient is less active.</li> <li>B. Additional vitamins and minerals may be required due to digestive disturbances.</li> <li>C. Medications may interfere with digestion and nutrient use.</li> <li>D. Poor oral hygiene or ill-fitting dentures may lead to poor nutrition.</li> <li>E. Ability to taste foods may be diminished.</li> <li>F. Many common diseases interfere with eating and/or the ability to use nutrients.</li> <li>G. Social isolation may interfere with appetite and body's utilization of nutrients.</li> <li>H. Specific food allergies lead to fewer food options.</li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Go to <a href="http://www.mypyramid.org">www.mypyramid.org</a> and follow instruction on <i>My Food Pyramid Activity</i></li> </ul>
<p><b>Objective 7</b>  <b>Discuss special nutritional needs of the infant, toddler, school age child and adolescents</b></p> <ul style="list-style-type: none"> <li>A. Infants <ul style="list-style-type: none"> <li>a. Breast milk, formula or a combination of the two.</li> <li>b. At six months most babies are ready to start solid foods like iron-fortified infant cereal as well as strained fruits, vegetables and pureed meats.</li> </ul> </li> <li>B. Toddlers and preschoolers <ul style="list-style-type: none"> <li>a. Grow in spurts and their appetites come and go in spurts.</li> <li>b. Provide healthful selection of foods. Including calcium and fiber rich foods.</li> <li>c. Encourage healthful selection of foods and avoid an excess of sugars, fats or sodium.</li> </ul> </li> <li>A. Preteens and Teens <ul style="list-style-type: none"> <li>a. Need more calories to support the many changes they will experience during puberty.</li> <li>b. Encourage healthful selection of foods.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> </ul>