

UNIT 1 - INTRODUCTION

1. Define nutrition.
2. Describe the function of nutrients.
3. Differentiate between essential and nonessential nutrients.
4. List the six classes of nutrients and include their sources, common names, energy yields, and basic functions in the body.
5. Calculate the percent intake of each of the classes in a typical diet.
6. List and know the meanings of the ABCD of nutritional assessment: Anthropometric, Biochemical, Clinical, and Dietary.
7. Discuss the steps of the scientific method and be able to define each as well as the following terms: association, control group, experimental group, cause and effect, peer review, placebo effect and statistical significant. Be able to explain how the scientific method relates to the field of nutrition.
8. Discuss factors influencing individual eating behaviors.
9. Define Kcalories.
10. Outline the basic units in the metric system and interpret a % value.
11. List the major characteristics of the American diet.
12. Describe what the RDA's represent.
13. Discuss what the labels on food products represent. Define DRI's.
14. List the Dietary Guidelines and the diseases that these guidelines are designed to prevent.
15. Describe the "Food Guide Pyramid" and know the serving size of each as well as the number of servings.
16. Describe the "Exchange System."
17. Identify where one can obtain reliable nutrition information.
18. Identify sources of nutritional quackery.
19. Evaluate and discuss the following:
organically grown food vs. conventionally grown food

"natural" foods
"health" foods and health food stores
food additives
high tech foods

UNIT 2 - DIGESTION

1. Define metabolism, catabolism, anabolism, mechanical digestion, chemical digestion, and absorption.
2. Be able to identify from diagrams the organs used in digestion and absorption and the functions of each organ.
3. Describe what an enzyme is and how it works.
4. Name the enzyme classes that act on each nutrient group.
5. Relate the role of nerves and hormones in the regulation of digestion and absorption.
6. Identify some conditions and intolerances that result when digestive processes are hampered.

UNIT 3 - CARBOHYDRATES

1. Relate the major carbohydrates: monosaccharides, disaccharides, and polysaccharides in terms of their basic structures and food sources.
2. Compare and contrast simple sugars, complex carbohydrates, and sugar substitutes in the diet.
3. List guidelines for carbohydrate intake.
4. List the functions of carbohydrates.
5. Describe the importance of glucose in energy metabolism.
6. Relate dietary fibers in terms of their basic structures (water soluble vs. water insoluble), food sources, and digestion in the human body.
7. Describe the benefits of proper fiber intake.
8. Discuss hormonal control of blood glucose levels.

9. Identify health disorders associated with carbohydrate intake.

UNIT 4 - LIPIDS

1. List the four classes of lipids and give examples of each.
2. Relate the major lipids: Glycerides, sterols, and phospholipids in terms of their basic structures and food sources.
3. Relate the major fatty acids in terms of their basic structures and food sources.
4. Know the essential fatty acids, their food sources, and their function in the human body.
5. Know the process and purpose of hydrogenation in food products.
6. List the functions of lipids.
7. Discuss how lipoproteins are carried in the bloodstream.
8. List guidelines for fat intake and how to identify hidden fat in foods.
9. Discuss available fat replacements.
10. Identify health disorders associated with fat intake.

UNIT 5 - PROTEINS

1. Describe how amino acids make up proteins.
2. List the functions of proteins.
3. List and distinguish between essential and nonessential amino acids.
4. List and distinguish between high quality (complete) and low quality (incomplete) proteins.
5. Discuss protein balance.
6. Calculate, when weight is given, the RDA for protein in adults.

7. List the different types of vegetarianism.
8. Discuss food planning for vegetarians.
9. Identify health disorders associated with protein intake.

UNIT 6 - VITAMINS

1. Define vitamin.
2. Classify vitamins according to whether they are fat soluble or water soluble.
3. Contrast each vitamin in terms of its major food sources, functions, deficiency symptoms, and toxicity symptoms.

UNIT 7 - PART A - MINERALS

1. Define mineral.
2. Classify the minerals as either major or trace minerals.
3. Contrast each mineral in terms of its major food sources, functions, deficiency symptoms, and toxicity symptoms.
4. Evaluate the pros and cons of vitamin and mineral supplements.

PART B - WATER

5. List and briefly explain the functions of water in the body.
6. Differentiate between extracellular and intracellular fluid.
7. Discuss movement of water through cell membranes (osmosis).
8. Describe the general guidelines for fluid intake.

UNIT 8 - WEIGHT CONTROL

1. Understand energy balance in terms of:
hunger vs. appetite vs. satiety.
basal metabolism vs. physical activity vs. thermic effect
of foods.
2. Calculate basal metabolic rate when given gender and weight.
3. Discuss current methods to evaluate energy balance.
Metropolitan Life Insurance Table.
body mass index
% body fat composition
etc.
4. Define obesity and discuss its causes.
5. Describe why and how reduced kcalorie intake, behavior modification, and
increased physical activity fit into any weight loss program.
6. Discuss the benefits and hazards of various weight-loss methods.
7. Evaluate weight reduction diets and determine which are unsafe and/or doomed to
fail.
8. Discuss briefly what should be taken into consideration during weight gain.
9. Differentiate between mesomorph, endomorph, and ectomorph.
10. Relate the presence of eating disorders to current social trends.
11. Describe the causes of, the effects of, the typical persons affected by, and the
treatment for anorexia nervosa.
12. Describe the causes of, the effects of, the typical persons affected by, and the
treatment for bulimia.
13. Discuss baryophobia.