

DIET PLANNING PRINCIPLES

OBJECTIVES/RATIONALE

A well balanced, nutritious diet is important to maintain health and wellness. The student will apply established diet-planning principles to develop nutritional diet plans.

TEKS 121.2 1I, 1J
121.24 6A,7E

TAKS ELA 1, 4
Mathematics 1, 2

KEY POINTS

- I. Diet Planning principles
 - A. Adequacy – provides sufficient energy and enough of the nutrients to meet the needs of most healthy people to maintain their health.
 - B. Balance – eat a variety of foods to obtain all the nutrients.
 - C. Nutrient Density – a measure of the nutrients a food provides relative to the energy it provides. The more nutrients and the fewer kcalories, the higher the nutrient density.
 - D. Energy control – managing energy intake.
 - E. Moderation – select foods low in fat and sugar, they promote weight gain.
 - F. Variety – select foods from different food groups
- II. Diet and Health Recommendations
 - A. Reduce fat intake to 30% or less of kcalories.
 - B. Reduce saturated fatty acids to less than 10% of kcalories.
 - C. Reduce cholesterol to less than 300 mg a day
 - D. Increase starch and complex carbohydrates
 - E. Keep protein intake at moderate levels
 - F. Maintain appropriate body weight by balancing food intake and exercise.
 - G. Limit alcohol to less than one ounce a day.
 - H. Salt intake should be less than 6 grams a day.
 - I. Maintain adequate calcium intake.
 - J. Avoid dietary supplements in excess of RDA's in a given day.
 - K. Maintain an optimum intake of fluoride.
- III. Dietary guidelines – combines the diet and health recommendations with the diet-planning principles
 - A. Eat a variety of foods
 - B. Balance the food you eat with physical activity
 - C. Maintain or improve your weight
 - D. Choose a diet with plenty of grain products, vegetables and fruits
 - E. Choose a diet low in fat, saturated fat and cholesterol
 - F. Choose a diet moderate in sugars
 - G. Choose a diet moderate in salt and sodium
 - H. Maintain an optimum intake of fluoride.
- IV. Diet planning guides – used to plan nutritious diets.

C. Food group plans

1. Foods similar in nature and nutrient content are used in diet planning.
2. Daily food guide –
 - a. places food into five groups based on nutrients in the food.
 - aa. breads, cereals and grains
 - bb. vegetables
 - cc. fruits
 - dd. meat, poultry, fish and alternatives
 - ee. milk, cheese and yogurt
 - b. One food may be substituted for another within the same group.
 - c. Does not specify energy intake

D. Exchange list

1. Used to help control calorie intake.
2. Developed for people with diabetes but anyone can use it to plan diets.
3. Does not guarantee adequate vitamin and mineral intake.
4. Categorized by the three nutrients.
 - a. carbohydrate group
 - b. fat group
 - c. protein group

E. Food guide pyramid

1. A pictorial depiction of the Daily Food Guide
2. Grains, fruits and vegetables are emphasized
 - a. 75% of a persons diet should come from these.
3. White dots scattered throughout all groups represent fat and sugars found in all groups.
4. Some things are not included in the pyramid that we eat and drink
 - a. Alcohol – it is not considered a nutrient.
 - b. Coffee, tea, spices – with the exception of water very few nutrients are found in these.

V. Recommended Dietary Allowances.

- A. The amount of selected nutrients considered adequate to meet the known nutrient needs of healthy people
- B. Prepared in table form by age, sex and height.
- C. Developed for energy and nutrients for which deficiencies occur.
 1. Requirement – the amount of a nutrient that will maintain normal biochemical and physiological functions and prevent symptoms of a deficiency.
 2. Deficiency – the amount of a nutrient below which almost all healthy people can be expected, over time to develop symptoms of a deficiency.
- D. RDA's are broad and set well above the average requirements.
 1. Most people fit near the mid-point on the scale.
 2. RDA's are NOT minimum requirements and should not be exceeded.

- a. Upper safe limit – the amount of a nutrient that appears safe for most health people. When exceeding this limit, there is concern that some people will experience symptoms of toxicity.
 - aa. Fluoride is an example
- E. RDA's have been developed for;
 - 1. Energy
 - a. Energy intake must equal energy expended if a constant body weight is to be maintained.
 - b. Energy requirement depends on lifestyle.
 - 2. Protein
 - 3. Vitamins – have very specific recommended allowances
 - 4. Some minerals
 - 5. No RDA has been set for fats or carbohydrates.
- F. Important things to remember about RDA's
 - 1. The estimates are for healthy people
 - 2. RDA's are NOT minimum requirements nor are they optimal requirements for everyone.
 - 3. RDA's should be met by eating a variety of foods.
 - 4. Apply to average daily intakes.
 - 5. RDA's are best used to establish and evaluate nutritional programs for a population or group.

ACTIVITIES

- I. Keep a diet diary for three days. Place the information obtained in the food guide pyramid. Analyze the information and compare to RDA's using the diet planning principles.
- II. Develop a well-balanced, nutritional diet using the diet planning principles.

MATERIALS NEEDED

Copy of RDA's
Copy of Exchange List
Copy of Food Guide Pyramid

ASSESSMENT

Writing Rubric
Completion of diet

ACCOMMODATIONS

For reinforcement, the student will create a poster of the food guide pyramid.

For enrichment, the student will develop a nutritional information pamphlet suitable for a certain population, such as diabetes.

REFLECTIONS
