

Nutrition Unit

Objective: Explore the elements necessary for proper nutrition and explain how individuals can make healthy food choices.

Lessons:

1. Nutrients
2. Guidelines for Healthy Eating
3. Food Packaging and Safety
4. Weight Management
5. Eating Disorders
6. Nutrition Review and Test

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National Health Education Standards

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.

Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.

Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.

Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.

Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.

Healthy Eating Essential Knowledge Concepts Grades 6 – 8

- Summarize a variety of nutritious food choices for each food group.
- Classify the number and appropriate sizes of servings of food from each food group that a person needs each day.
- Explain why some food groups have a greater number of recommended portions than other food groups.
- Analyze the benefits of healthy eating.
- Describe the federal dietary guidelines for teens.
- Explain the similarities and differences among protein, fats, and carbohydrates regarding nutritional value and food sources.
- Describe the benefits of eating in moderation.
- Summarize the benefits of eating plenty of fruits and vegetables.
- Analyze the benefits of drinking plenty of water.
- Differentiate between nutritious and non-nutritious beverages.
- Identify foods that are high in fiber.
- Identify food preparation methods that add less fat to food.
- Identify examples of whole grain foods.
- Describe the benefits of consuming an adequate amount of calcium and a variety of foods high in calcium.
- Describe the benefits of eating a variety of foods high in iron.
- Summarize the benefits of limiting the consumption of fat and added sugar.
- Describe the relationship between what people eat their physical activity level, and their body weight.
- Explain various methods available to evaluate body weight.
- Identify healthy and risky approaches to weight management.
- Differentiate between a positive and negative body image, and state the importance of a positive body image.
- Describe the signs, symptoms, and consequences of common eating disorders.
- Summarize how eating disorders impact proper nutrition.
- Summarize food safety strategies that can control germs that cause food borne illnesses.

Healthy Eating Essential Knowledge Concepts Grades 9 – 12

- Describe the recommendations of the *Dietary Guidelines for Americans*.
- Describe the relationship between nutrition and overall health.
- Describe the relationship between diet and chronic diseases such as heart disease, cancer, diabetes, hypertension, and osteoporosis.
- Analyze the benefits of healthy eating.
- Explain food sources that provide key nutrients.
- Describe the importance of eating a variety of the appropriate foods to meet daily nutrient and caloric needs.
- Analyze the benefits of drinking water before, during, and after physical activity.
- Explain how to incorporate foods that are high in fiber into a healthy daily diet.
- Explain how to incorporate an adequate amount of calcium into a healthy daily diet.
- Explain how to incorporate an adequate amount of iron into a healthy daily diet.
- Identify how to make a vegetarian diet healthy.
- Describe the importance of healthy eating and physical activity in maintaining a healthy weight.
- Explain how the *Dietary Guidelines for Americans* are useful in planning a healthy diet.
- Describe healthy and risky approaches to weight management.
- Explain the effects of eating disorders on healthy growth and development.

Nutrients

Objectives: Students will be able to list the 6 nutrients and their role in maintaining health.

Materials and Assessments: Are You a Healthy Eater? Worksheet, Nutrition Pre-Test, Nutrients PowerPoint, Nutrients Quiz

Procedure:

- Focus: (Are You a Healthy Eater? Worksheet) Students will answer questions about their own eating habits.
- Review: (Nutrition Pre-Test) Students will complete a true/ false pre-test using their current knowledge of nutrition. Students should attempt all questions, even if they do not know the answer.
- Teacher Input: (Nutrients PowerPoint) Nutrients are substances that your body needs to grow, to repair itself and to supply you with energy
Classified into 6 groups:
 - **Carbohydrates** – the starches and sugars present in foods
 - **Proteins** – nutrients that help build and maintain body tissues and cells
 - **Fats** – a type of lipid (a fatty substance that does not dissolve in water)
 - **Vitamins** – compounds that help regulate many vital body processes, including digestion, absorption and metabolism of other nutrients
 - **Minerals** – substances that the body cannot manufacture but that are needed for forming healthy bones and teeth and for regulating many vital body processes
 - **Water** – vital to every body function
- Guided Practice: Students will complete nutrients chart.

Nutrient	Health Benefits	Food Sources

- Independent Practice: (Nutrients Quiz) Students will complete a multiple choice quiz about the six nutrients.
- Closure: Review nutrients and the role they play on overall nutrition.

Are You a Healthy Eater?

As we begin our study of nutrition it is important to evaluate your own eating habits. Answer the following questions about the types of food you eat.

What are your favorite types of food?

What are your favorite types of snacks?

How often do you snack?

What is your favorite thing to drink?

What is your favorite dessert?

What is your favorite restaurant?

How often do you eat fast food?

How many meals a day do you eat?

Do you prefer food that is grilled or food that is fried?

Describe your typical breakfast.

Describe your typical lunch.

Describe your typical dinner.

Do you think you are a healthy eater? Why or why not?

NUTRITION PRE-TEST

Complete the Pre-Test using your knowledge of Nutrition.

TRUE OR FALSE:

- | | | |
|------|-------|--|
| True | False | Appetite is a need to eat |
| True | False | Fiber is an indigestible complex carbohydrate |
| True | False | You only need 1 serving of fruit each day |
| True | False | A healthy diet is one that is high in salt |
| True | False | It is not important to eat breakfast |
| True | False | Fad diets can be dangerous |
| True | False | 5–7oz of cooked lean meat is a serving |
| True | False | Salmonella and E Coli are types of eating disorders |
| True | False | Fat is unhealthy and not necessary in a healthy diet |
| True | False | A calorie is a unit of energy produced by food |
| True | False | Calcium is a vitamin that helps the body |
| True | False | You must eat 4 servings of vegetables a day |
| True | False | Anorexia is an important mineral for the body |
| True | False | A sandwich has 1 serving of grain |
| True | False | High In means that the food contains 55% of daily value |
| True | False | You should not eat food that has been pasteurized |
| True | False | Everyone should eat a similar healthy diet |
| True | False | An individual's nutritional needs change during their life |

SHORT ANSWER:

What is a nutrient?

What are the food groups?

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SHORT ANSWER:

What is a nutrient? Nutrients substances that your body needs to grow, to repair itself and to supply you with energy

What are the food groups? Grains, Fruit, Vegetables, Meat and Beans, Milk

Nutrient Chart

Fill in the following chart. The first row has been completed as an example.

Nutrient	Health Benefits	Food Source
Carbohydrates	Body's preferred source of energy	Potatoes, pastas, bread, legumes, fruits

Nutrient Chart

Fill in the following chart. The first row has been completed as an example.

Nutrient	Health Benefits	Food Source
Carbohydrates	Body's preferred source of energy	Potatoes, pastas, bread, legumes, fruits
Proteins	Build and maintain body cells and tissues, used to make hormones, enzymes and antibodies, supply body with energy	Meat, fish, poultry, eggs, milk, cheese, yogurt, nuts, soybean products, beans,
Fats	Concentrated form of energy, transport vitamins in blood, help satisfy hunger longer	Animal fats, tropical oils, vegetable fat
Vitamins	Regulate body processes including digestion, absorption and metabolism	A – carrots C – citrus fruits D – fortified milk K – spinach
Minerals	Form healthy bones and teeth, regulate many body processes	Calcium – dairy products Iron - meat
Water	Transports nutrients, carries wastes from body, lubricates joints, maintains body temperature	Water, milk, juice

Nutrients Quiz

1. What are two types of carbohydrates?

- A. Simple and Complex
- B. Saturated and Unsaturated
- C. Whole Grains and Fiber
- D. Starches and Fiber

2. What is a good source of protein?

- A. Whole Grains
- B. Meat and Beans
- C. Apples and Bananas
- D. Oranges

3. What is a fatty substance that does not dissolve in water?

- A. Fat
- B. Lipid
- C. Carbohydrate
- D. Saturated

4. What is a mineral that is important for red blood cell function?

- A. Magnesium
- B. Phosphorus
- C. Iron
- D. Calcium

5. What is the body's main source of energy?

- A. Sugars
- B. Proteins
- C. Fats
- D. Carbohydrates

6. Proteins are made of long chains of

- A. Enzymes
- B. Hormones
- C. Amino Acids
- D. Fiber

7. What is the difference between vitamins and minerals?

- A. Minerals help regulate vital processes, vitamins do not
- B. Minerals help with bone development, vitamins do not
- C. Vitamins can be manufactured by the body, minerals cannot
- D. Vitamins can be taken in the form of pills, minerals cannot

8. Which type of fat is solid at room temperature?

- A. Simple
- B. Saturated
- C. Fat Soluble
- D. Unsaturated

9. What is a good source of vitamin C?

- A. Carrots
- B. Whole Grains
- C. Fish and Nuts
- D. Citrus Fruits

10. What nutrient adds texture and flavor to food?

- A. Proteins
- B. Fats
- C. Carbohydrates
- D. Water

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Guidelines for Healthy Eating

Objectives: Students will be able to evaluate the concepts of balance, variety and moderation, using MyPlate and the National Dietary Guidelines.

Materials and Assessments: MyPlate PowerPoint, choosemyplate.gov Website, Art Supplies (construction paper, markers, colored pencils etc.), Project Examples (USDA and Student)

Procedure:

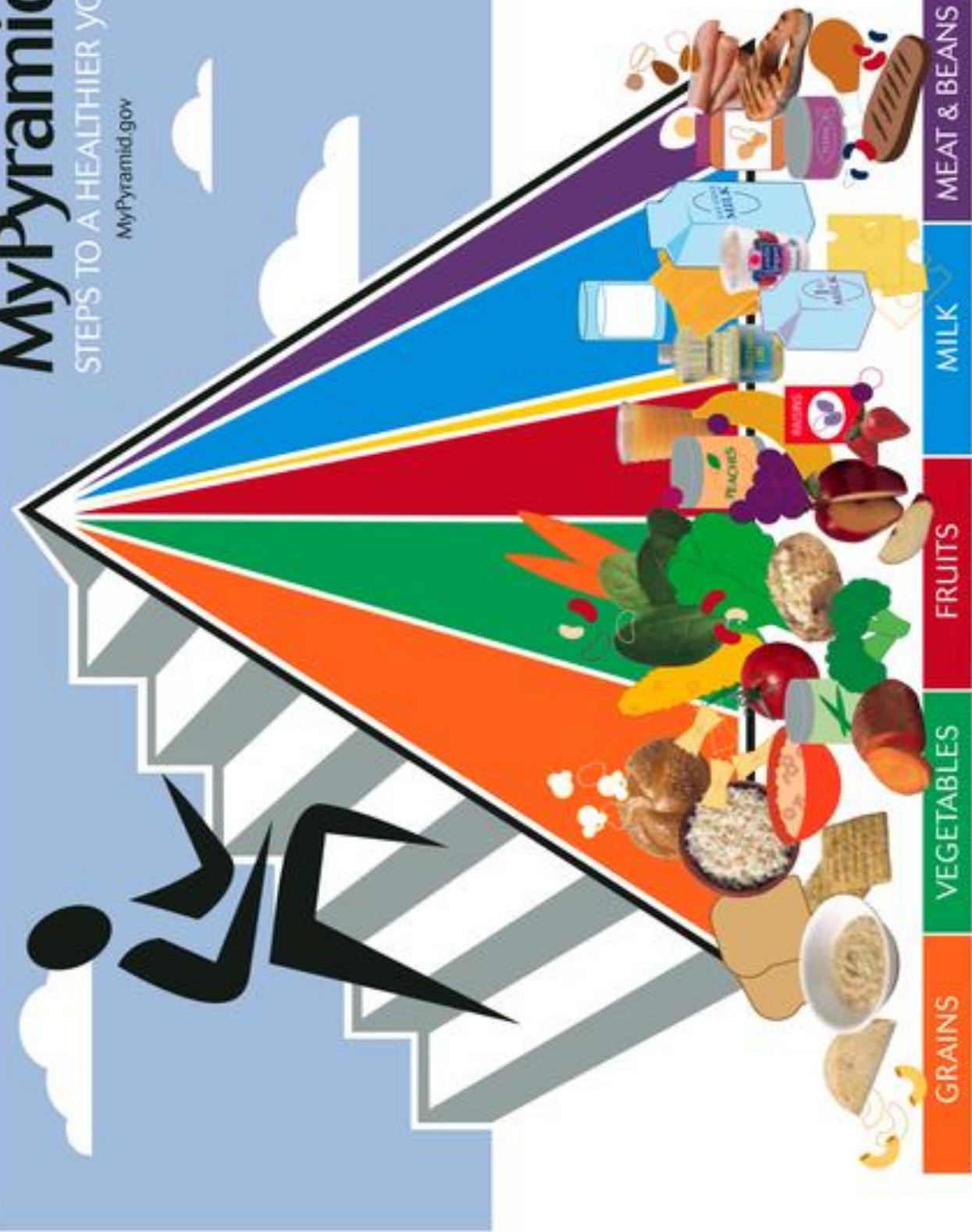
- Focus and Review: What is the difference between appetite and hunger? On a sheet of paper compare and contrast hunger and appetite.
Hunger – natural physical drive that protects you from starvation; Need
Appetite – desire rather than a need to eat; Desire or want
- Teacher Input: (MyPlate PowerPoint Presentation) The Dietary Guidelines for Americans are a set of recommendations for healthy eating and active living. They encourage Americans to follow adopt a balanced eating plan such as My Plate. My Plate includes recommendations for 5 major food groups and physical activity.

Food Groups:

- **Grains:** Make half your grains whole, Aim for at least 3 ounces of whole grain a day
 - **Vegetables:** Vary your veggies between dark green, orange, dry beans, starchy and other
 - **Fruits:** Focus on fruits, Eat a variety of fruit and go easy on fruit juices
 - **Milk:** Get your calcium-rich foods, Go low-fat or fat-free when you choose milk, yogurt or cheese.
 - **Meat & Beans:** Go lean with protein, choose low-fat or lean meats and poultry, Vary your protein routine – choose more fish, beans, peas, nuts and seeds
 - Guided Practice: (choosemyplate.gov) What counts as a serving? Students will use the choosemyplate.gov website to review and evaluate serving sizes of a variety of foods they eat. For example, a piece of bread counts as a serving, so a sandwich would have 2 servings of grain. Students will have an opportunity to select the foods and predict serving sizes.
 - Independent Practice: With a partner students will create their own visual representation of the information in the Dietary Guidelines for Americans
 - Project should include information on the 5 food groups and the appropriate serving size.
 - It should be a new and creative design
- Projects should use the old Food Guide Pyramid, MyPyramid and model of the new MyPlate as a guide. Each format displays the same information about serving size and the 5 food groups. With each new design the USDA has attempted to make the information easy to understand from a visual format. For example the new MyPlate presents the information in a format that is easy to apply because it gives you an idea of how your plate should look when it's full of food.
- Closure: Review recommendations for healthy eating and application.

MyPyramid

STEPS TO A HEALTHIER YOU
MyPyramid.gov



Choose **MyPlate**.gov



Grains

Protein

Fruits



Vegetables

Dairy

Superstar Nutrition

Food Packaging and Safety

Objectives: Students will be able to utilize information on food labels. Students will develop and analyze strategies related to the prevention of foodborne illness.

Materials and Assessments: Food Packaging and Safety PowerPoint, Nutrition Labels Worksheet

Procedure:

- Focus and Review: Nutrition labels on food products contain information that can help you choose healthy foods. On a sheet of paper make a list of the types of information that can assist you in making healthy food choices.
- Teacher Input: (Food Labels PowerPoint) A variety of information is printed on food products, including information of Nutrition Facts panel, ingredients, substitutes and nutrient content claims. This information is printed to help consumers make nutritious and safe decisions.

Nutrition Facts -Law requires these information panels be placed on foods: Serving Size and Per Container, Calories and Calories from Fat, Nutrient Information and Advice about the amounts of certain nutrients that should be eaten daily

Ingredient list – listed in descending order

Substitutes – Fat and Sugar

Nutrient Content Claims – Light, Less, Free, More, High, Excellent Source of, Rich In, Lean

Open Dating – Expiration, Freshness, Package, Sell-by Dates

Labels on food packages are also intended to help prevent reactions to food sensitivities.

Food Sensitivities:

Food Allergies – a condition in which the body's immune system reacts to substances in foods

Food Intolerance - A negative reaction to a food caused by a metabolic problem

Food Borne Illness – Food Poisoning:

Steps to reduce food poisoning:

1. Clean 2. Separate 3. Cook 4. Chill

- Guided Practice: Nutrient Content Claims – Students will complete an activity about the actual values of nutrients provided in foods depending on how they are labeled. Students will fill in the blank with their best guess about what labels such as “more” mean. Teacher will review answers with students after completion.
- Independent Practice: (Nutrition Labels Worksheet) Students will use a nutrition label to answer questions about the product and its health benefits.
- Closure: In a paragraph explain ways the information on food labels can help you choose nutritious snacks and foods.

Nutrition Labels

Use the food label to answer the following questions.

1. What is considered a serving of this product?
2. How many calories are in one serving of this product?
3. What percentage of your daily values of calcium would this product give you?
4. What is the recommended number of daily grams of total fat for someone who is on a 2,000 calorie diet?
5. Besides the information listed in the Nutrition Facts Panel, what other information is listed on food packaging.
6. Is this food nutrient dense? Write a paragraph about the product to support your answer.

Nutrition Facts				
Serving Size 1 cup (228g)				
Servings per Container 2				
Amount Per Serving				
Calories 280	Calories from Fat 120			
% Daily Value*				
Total Fat 13g	20%			
Saturated Fat 5g	25%			
Trans Fat 2g				
Cholesterol 2mg	10%			
Sodium 660mg	28%			
Total Carbohydrate 31g	10%			
Dietary Fiber 3g	0%			
Sugars 5g				
Protein 5g				
Vitamin A 4%	:	Vitamin C 2%		
Calcium 15%	:	Iron 4%		
<small>*Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs.</small>				
Calories: 2,000 2,500				
Total Fat	Less than	65g	80g	
Sat Fat	Less than	20g	25g	
Cholesterol	Less than	300mg	300mg	
Sodium	Less than	2,400mg	2,400mg	
Total Carbohydrate		300g	375g	
Fiber		25g	30g	
Calories per gram:				
Fat 9	•	Carbohydrate 4	•	Protein 4

Nutrition Labels

Use the food label to answer the following questions.

1. What is considered a serving of this product?

1 Cup or 228g

2. How many calories are in one serving of this product?

280

3. What percentage of your daily values of calcium would this product give you?

15%

4. What is the recommended number of daily grams of total fat for someone who is on a 2,000 calorie diet?

Less than 65g

5. Besides the information listed in the Nutrition Facts Panel, what other information is listed on food packaging.

Ingredients, Nutrient Content Claims

(Light, Less, Free, High In, Lean ect.) Open Dating (Expiration Date, Freshness Date, Sell by Date ect.) Allergen Information

6. Is this food nutrient dense? Write a paragraph about the product to support your answer.

No – this food is high in fat and sodium and provides very little nutritional value.

Nutrition Facts				
Serving Size	1 cup (228g)			
Servings per Container 2				
Amount Per Serving				
Calories	280	Calories from Fat 120		
		% Daily Value*		
Total Fat 13g		20%		
Saturated Fat 5g		25%		
Trans Fat 2g				
Cholesterol 2mg		10%		
Sodium 660mg		28%		
Total Carbohydrate 31g		10%		
Dietary Fiber 3g		0%		
Sugars 5g				
Protein 5g				
Vitamin A 4%	•	Vitamin C 2%		
Calcium 15%	•	Iron 4%		
*Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs.				
Calories:	2,000	2,500		
Total Fat	Less than	65g	80g	
Sat Fat	Less than	20g	25g	
Cholesterol	Less than	300mg	300mg	
Sodium	Less than	2,400mg	2,400mg	
Total Carbohydrate		300g	375g	
Fiber		25g	30g	
Calories per gram:				
Fat 9	•	Carbohydrate 4	•	Protein 4

Weight Management

Objectives: Examine the relationship among body composition, diet and fitness. Describe healthy ways to manage weight. Describe the risks of fad diets and other dangerous weight loss strategies.

Materials and Assessments: Weight Management PowerPoint, Fad Diets Writing

Prompt

Procedure:

- Focus and Review: Media messages can have a strong impact on a person's body image. In your notebooks write down ways that media can affect body image. Give examples.
- Teacher Input: (Maintaining a Healthy Weight PowerPoint)

Calories – units to measure energy

Factors influencing appropriate weight – age, gender, height, physical activity level, metabolism, body frame, growth rate

BMI - Ratio that allows you to assess body size in relation to height and weight

Overweight – a condition in which a person is heavier than the standard weight range for his or her height

Obesity – having an excess amount of body fat

Healthy weight loss strategies: Instead of 2,000 calories eat 1,700 to 1,800, Include your favorites in moderation, Eat a variety of low-calorie, nutrient dense foods, Drink plenty of water, Increase physical activity, You should only lose about a pound a week

Underweight – a condition in which a person is less than the standard weight range for his or her height

Healthy weight gain strategies: Increase your calorie intake, Eat often, Take second helpings, Eat nutritious snacks, Build muscle

Fad Diets – weight loss plans that are popular only for a short period of time

Weight cycling – The repeated pattern of loss and regain of body weight

- Guided Practice: BMI Calculations – Teacher will guide students through calculations of their BMI. Student privacy is maintained. Use this formula to find your BMI:

$$\text{BMI} = \text{weight (in pounds)} \times 703 / [\text{height (in inches)}]^2$$

Once students have found their BMI they should use a BMI chart to determine if they fall in an appropriate weight range. Students are encouraged to keep in mind that these results may not necessarily mean that an individual is unhealthy. For example, a body builder with a high muscle mass may have a high BMI.

- Independent Practice: (Fad Diets Writing Prompt) Students will write a newspaper article for the high school paper on the effects of fad diets. They will use the ideas presented in the prompt, personal experiences, observations, and/or readings.
- Closure: Review information pertaining to weight management and how to keep a healthy weight.

FAD DIETS

Write a newspaper article for your high school paper on the effects of fad diets. You may use the ideas presented below, your own experiences, observations, and/or readings.

Fad Diet: Weight-loss plans that is popular for only a short period of time; A diet plan that promotes a restricted eating plan that is unhealthy and lacking in important calories and nutrients.

Source: Glenco Health Textbook

"Quick and easy weight loss." You've seen the claims and probably hoped they were true. However, the claim of quick and easy weight loss is usually the first sign of a scam or fad diet. Anyone who has lost weight successfully and kept it off knows that long term sustainable weight loss is neither quick nor easy. The problem with losing weight quickly is that it doesn't last. The weight comes back plus some more and then you're worse off than if you had not tried the diet in the first place.

The worst thing about fad diets is the emotional consequences they have on those who fail when trying to follow them. Those who start the diet expect that they are going to lose weight quickly and be able to stick with it. Someone who has tried several different diets without success feels like a failure. Unfortunately dieters tend to blame themselves for the failure, rather than recognizing that the diets they were attempting were unrealistic and impossible to stick with in the long term. Before starting a diet, be sure to assess what you expect and whether that is a realistic expectation.

Source: LiveStrong, Lance Armstrong Foundation

Many fad diets involve cutting out certain foods and sometimes cutting out an entire food group. Some severely limits carbohydrate, some limit fat and some diets have you only eating raw foods. The danger in being restrictive with the foods you eat is that it can result in nutritional deficiencies. The foods the dieter eats fail to provide the body with the nutrients it needs for health and growth.

Source: Glenco Health Textbook

As you write your newspaper article on the effects of fad diets, remember to

1. Focus on the effects of fad diets
2. Consider the purpose, audience, and context of your article
3. Organize the ideas and details effectively
4. Include specific examples that clearly develop your article
5. Edit your article for standard grammar, spelling and punctuation.

Eating Disorders

Objectives: Describe the causes, symptoms and treatment of eating disorders.

Materials and Assessments: Eating Disorders PowerPoint, Eating Disorder Worksheet

Procedure:

- Focus and Review: Eating Disorder Brainstorming – In one minute write down as many facts as you can about eating disorders.
- Teacher Input: (Eating Disorders PowerPoint)

Eating disorders – extreme, harmful eating behavior that can cause illness or death

Anorexia – A disorder in which the irrational fear of becoming obese results in severe weight loss from self-imposed starvation

Bulimia – A disorder in which some form of purging or clearing the digestive tract follows cycles of overeating

Binge Eating – a disorder characterized by compulsive overeating

Affects: Men and women, usually teens or young adults, occurs with other mental disorders

Treatment: Individual, group, and/or family therapy, Medical care and patient monitoring, Nutritional counseling, Medications

- Guided Practice: Students will write a skit about how to help a friend with an eating disorder. They will perform the skit for the class. Everyone must participate.
Student's skits must include: Definition of the disorder, Signs and symptoms, Causes of the disorder, Health consequences, Ways to get help.
- Independent Practice: (Eating Disorders Worksheet) Students will place a check in the column for each disorder that the characteristic describes. Answers may be 1, 2 or all 3 disorders.
- Closure: Review common eating disorders, causes, symptoms and treatment options.

Eating Disorders

Place a check in the column for each disorder that the characteristic describes. Answers may be 1, 2 or all 3 disorders.

Anorexia	Bulimia	Binge Disorder	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Harmful mental disorder
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Involves cycles of overeating
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Can affect males
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. A person purges themselves after periods of overeating
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Individual is usually very thin
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Can be treated with therapy and medications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Can cause serious illness or death
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. An individual may use laxatives or diuretics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Usually affects teens and young adults
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Disorder usually results in weight gain or obesity

Eating Disorders

Place a check in the column for each disorder that the characteristic describes. Answers may be 1, 2 or all 3 disorders.

Anorexia	Bulimia	Binge Disorder	
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Individual is usually very thin
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6. Can be treated with therapy and medications
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<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8. An individual may use laxatives or diuretics
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9. Usually affects teens and young adults
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Disorder usually results in weight gain or obesity

Nutrition Review and Assessment

Objectives: Explore the elements necessary for proper nutrition and explain how individuals can make healthy food choices.

Materials and Assessments: Nutrition Jeopardy Review Game PowerPoint, Nutrition Plan Example, Nutrition Test

Procedure:

- Focus and Review: How do the ideas of variety, moderation and balance apply to healthful eating? Write a half page response on a sheet of paper.
- Teacher Input: Review the basic elements of good nutrition. There are 6 nutrients needed for proper nutrition carbohydrates, proteins, fats, vitamins, minerals and water. Guidelines such as the Dietary Guidelines for Americans and the Food Guide Pyramid help you to make healthy eating choices. Additionally, the information printed on food packages can be used to help you make nutritious and safe choices. This information can help you to manage and maintain a healthy body weight.
- Guided Practice: (Nutrition Jeopardy Review Game PowerPoint) Students will be randomly divided into three teams. They will play a Jeopardy review game to study for their nutrition test. Team one will pick a category and a question. Categories include nutrients, food labels, food sensitivities, eating disorders and vocabulary. Point values range from 100 to 500, with 500 questions being the most difficult. Teams will raise their hand when they believe they have the correct answer. If they answer the question correctly they will receive the points and have the opportunity to pick the next question. If they answer incorrectly, the team will lose the points and the other two teams will have an opportunity to guess the correct answer.
- Independent Practice: (Nutrition Plan Example) Students will create a meal plan following the recommendations in this unit. Meal plans should include breakfast, lunch, dinner and snacks for 3 days. Each day should meet the recommendations for nutrients and food groups.
- Closure: Answer any final questions before nutrition test. Students will take Nutrition Test.

Student Example

Meal Plan							
Breakfast		Lunch		Dinner		Snacks	
Foods	Servings	Foods	Servings	Foods	Servings	Foods	Servings
Scrambled egg w/ cheese on English muffin Orange juice	2 grains 1 fruit 1 meat 1 milk	Ham & cheese sandwich Apple	2 grains 1 fruit 1 meat 1 milk	Teriyaki chicken stir fry w/ vegetables Rice	2 grains 2 vegetable 1 meat	Carrot Sticks Granola Bar Milk	1 grain 1 vegetable 1 milk
Spinach and mushroom omelet	1 meat 2 vegetable	Macaroni and cheese	2 grains 1 milk	Spaghetti w/ meatballs topped w/ marinara sauce & parmesan cheese Garlic bread	3 grains 1 vegetable 1 meat 1 milk	Yogurt w/ granola Apple juice	1 grain 1 milk
Dry cereal Milk Grapefruit	1 grain 1 fruit 1 milk	BLT sandwich Potato chips	2 grains 2 vegetable 1 meat	Steak Mashed potatoes Green Beans Dinner roll	1 grain 2 vegetables 2 meat	Bagel Banana Milk	2 grains 1 fruit 1 milk
Sausage biscuit Orange juice	2 grains 1 fruit 1 meat	Cheeseburger w/ lettuce, tomato, onion Fries	2 grains 2 vegetable 2 meat 1 milk	Veggie pizza	2 grains 1 vegetable 1 milk	Grapes Milk	1 fruit 1 milk

Nutrition Test

Matching: Match each definition in the left column with the correct term in the right column. Write the letter of the term in the space provided. (3 points each)

- | | |
|---|--------------------------|
| _____ 1. The process by which the body takes in and uses food | a. Food Guide Pyramid |
| _____ 2. A guide for making healthful daily food choices | b. Fiber |
| _____ 3. Starches and sugars in foods | c. Foodborne Illness |
| _____ 4. Substances intentionally added to food to produce a desired effect | d. Proteins |
| _____ 5. An indigestible complex carbohydrate | e. Food Additives |
| _____ 6. Food Poisoning | f. Nutrition |
| _____ 7. A disorder characterized by compulsive overeating | g. Dietary Supplement |
| _____ 8. Nutrients that help build and maintain body cells and tissues | h. Carbohydrates |
| _____ 9. A nonfood form of one or more nutrients | i. Binge Eating Disorder |
| _____ 10. A desire rather than a need to eat | j. Appetite |

Multiple Choice: In the space provided write the letter of the choice that best completes the statement or answers the question. (2 points each)

- | | |
|---|-------------------------------------|
| _____ 11. Complex carbohydrates are found in | |
| a. fruit | c. sugarcane |
| b. milk | d. whole grains |
| _____ 12. Fats are a type of | |
| a. lipid | c. vitamin |
| b. mineral | d. protein |
| _____ 13. Fat-soluble vitamins | |
| a. do not build up in the body | c. are not needed by the body |
| b. are absorbed by fat | d. pass easily into the bloodstream |
| _____ 14. The nutrient that makes up the greatest percentage of the body is | |
| a. vitamin C | c. a complex carbohydrate |
| b. water | d. protein |
| _____ 15. Which of the following is NOT a food group? | |
| a. bread, cereal, rice, pasta | c. milk, yogurt, cheese |
| b. vegetable | d. fats, oils, sweets |
| _____ 16. The Nutrition Facts panel on food labels includes information on | |
| a. the number of calories per serving | c. the expiration date |
| b. the price per unit | d. the cooking process used |
| _____ 17. The main source of energy for the body comes from | |
| a. minerals | c. carbohydrates |
| b. vitamins | d. water |

- _____ 18. Eating foods with fiber
- a. helps prevent intestinal problems
 - b. increases the risk of certain cancers
 - c. can cause heart problems or complications
 - d. increases blood cholesterol levels
- _____ 19. What food is a good source of vitamin A?
- a. citrus fruits
 - b. whole grain cereals
 - c. carrots
 - d. water
- _____ 20. Food additives are used in food products to
- a. enhance the food's flavor
 - b. improve the food's color
 - c. lengthen its storage life
 - d. all of the above
- _____ 21. What food is a good source of vitamin C?
- a. citrus fruits
 - b. whole grain cereals
 - c. carrots
 - d. water
- _____ 22. Fad diets, liquid diets and fasting are dangerous because they
- a. do not provide necessary nutrients
 - b. expensive weight loss methods
 - c. cause a person to become hydrated
 - d. involve discussion with a health care professional
- _____ 23. Hunger is
- a. a desire for food
 - b. a physical need for food
 - c. a response to stretched stomach walls
 - d. a learned response
- _____ 24. Anorexia nervosa
- a. is not as serious as bulimia
 - b. is serious, but not life threatening
 - c. usually goes away on its own
 - d. has effects similar to malnutrition
- _____ 25. People's food choices are NOT affected by
- a. cultural and ethnic background
 - b. convenience
 - c. hunger
 - d. family and friends

True/ False: Read each statement carefully, then mark weather the statement is true or false. Write the whole word on the line. (2 points each)

- _____ 26. The term light refers to foods with no amount, or an insignificant amount of total fat, saturated fat, cholesterol, sodium, sugars or calories.
- _____ 27. Fish, meat, and eggs are rich in carbohydrates.
- _____ 28. Water is a nutrient that is vital to every body function.
- _____ 29. Corn syrup is a type of protein.
- _____ 30. The footnote, or lower part of the Nutrition Facts panel is the same from product to product.
- _____ 31. Fasting for more than short periods deprives your body of needed nutrients.
- _____ 32. You can use and store a product after its expiration date.
- _____ 33. Bulimia and binge eating are the same because they involve cycles of overeating.
- _____ 34. Fatty acids are classified as either saturated or unsaturated.
- _____ 35. BMI evaluates your body size in relation to your height and weight

- _____ 36. You need 5-7 servings of fruits each day.
- _____ 37. Ingredients are listed in ascending order.
- _____ 38. The repeated pattern of loss and regain of body weight is called bicycling.
- _____ 39. Bulimia and Anorexia are each types of eating disorders.
- _____ 40. All dietary supplements are risk free.

Short Answer: Answer 3 out of the following questions. A 4th may be used for extra credit. (3 points each)

41. How do the ideas of variety, moderation, and balance apply to healthful eating?

42. What are some steps to reduce foodborne illness?

43. List two examples of risky weight loss strategies.

44. Compare and contrast vitamins and minerals.

45. What is the formula to find someone's BMI?

Nutrition Test

Matching: Match each definition in the left column with the correct term in the right column. Write the letter of the term in the space provided. (3 points each)

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| <u>b</u> ___ 5. An indigestible complex carbohydrate | e. Food Additives |
| <u>c</u> ___ 6. Food Poisoning | f. Nutrition |
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| | b. are absorbed by fat | d. pass easily into the bloodstream |
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| | b. vitamins | d. water |

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- False** _____ 40. All dietary supplements are risk free.

Short Answer: Answer 3 out of the following questions. A 4th may be used for extra credit. (3 points each)

41. How do the ideas of variety, moderation, and balance apply to healthful eating?

To have a healthy diet people should eat a variety of foods from the different food groups; people should moderate foods high in sugar, fats and sodium; Balance calories consumed and calories burned

42. What are some steps to reduce foodborne illness?

Clean, separate, cook, chill

43. List two examples of risky weight loss strategies.

Fad diets, weight cycling, liquid diets, diet pills, fasting

44. Compare and contrast vitamins and minerals.

Both help regulate body processes; vitamins can be produced by the body, minerals cannot

45. What is the formula to find someone's BMI?

BMI = (Weight(lbs) x 703) ÷ Height(in²)