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COURSE INTRODUCTION:

Course Description: This course meets the needs of today's students and focuses on the promotion of personal and family health throughout the life span. It includes concepts in communicable diseases, family relations, substance abuse, nutrition, sports nutrition, fitness and other concerns pertaining to the development of personal and family health. Career opportunities in health-related fields are investigated. This course meets the high school graduation requirement for health.

Course Rationale:

To assist Missouri citizens in preparing for success in family and career life, competencies in the Family and Individual Health course taught in Family and Consumer Sciences (FCS) education programs enable students to:

- a) construct meaning pertinent to health care knowledge;
- b) communicate effectively with family members and health care providers;
- c) solve problems impacting health and wellness; and
- d) and utilize leadership, problem-solving, and communication skills to make responsible health care decisions involving individuals, families, and communities.

Guiding Principles:

Integrating Processes Of Thinking, Communication, Leadership, and Management In Order To Apply Health and Wellness Knowledge And Skills.

- 1. Demonstrate components of critical thinking, creative thinking, and reasoning.
- 2. Evaluate effective communication processes in school, family, career, and community settings.
- 3. Demonstrate leadership that encourages participation and respect for the ideas, perspectives, and contributions of group members.
- 4. Apply management, decision-making, and problem solving processes to accomplish tasks and fulfill responsibilities.
- 5. Examine the interrelationships among thinking, communication, leadership, and management processes to address family, community, and workplace issues.
- 6. Demonstrate fundamentals for college and career success (e.g., strong work ethic, time-management, positive attitude, adaptability/flexibility, stress resilience, accountability, self-discipline, resourcefulness, cooperation, self-assessment).
- 7. Utilize FCCLA programs and activities to facilitate the health and wellness of individuals and families.

Course Essential Questions:

- 1. What knowledge is needed for an individual to have a healthy lifestyle throughout their life span?
- 2. How does the health of the individual impact the health and well-being of the family?
- 3. How does the health of the individual impact the health and well-being of society?

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UNIT DESCRIPTION: Unit 4 - Promoting Nutritional Health

This unit will cover the relationship between dietary guidelines and health and wellness throughout the life cycle.

SUGGESTED UNIT TIMELINE: 2 weeks

CLASS PERIOD (min.): 50 min class periods

ESSENTIAL QUESTIONS:

- 1. What are the relationships between dietary guidelines and wellness throughout the life cycle?
- 2. What nutritional components contribute to overall wellness?

ESSENTIAL MEASURABLE LEARNING	CROSSWALK TO STANDARDS	
OBJECTIVES	CCSS ELA NSFCSE DOK Grade Level	
Analyze relationships between dietary guidelines and wellness	SL.11-12.5 14.3.1 3 RI.11-12.4	
2. Compare nutritional needs at different stages of the life cycle	RST.11-12.5 9.3.1 2	
3. Identify nutritional needs of individuals with special health requirements	RST.11-12.5 9.4.1 1 14.3.2	

ASSESSMENT DESCRIPTIONS*: (Write a brief overview here. Identify Formative/Summative. Actual assessments will be accessed by a link to PDF file or Word doc.)

Formative Assessment_ Food Journal Analysis Project 2012 Students will access their daily diet to see if they are meeting their daily food group needs.

Summative Assessment 1_MyPlate Menus Each student will generate a healthy meal play based on their own nutritional needs using MYPLATE.GOV.

Summative Assessment 2_MyPlate Visual Representation of One Meal Each Student will create a visual representation of one of their

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meals. Portion sizes should match the MYPLATE.GOV guidelines.

*Attach Unit Summative Assessment, including Scoring Guides/Scoring Keys/Alignment Codes and DOK Levels for all items. Label each assessment according to the unit descriptions above (i.e., Grade Level/Course Title/Course Code, Unit #.)

Obj. #	INSTRUCTIONAL STRATEGY (research-based): (Teacher Methods)
1 3	Instructional Strategy 1_Formative Assessment - Teacher will instruct students on keeping a food journal and on how to assess their diet using MYPLATE.GOV
1 3	2. Instructional Strategy 2_Teacher will give students the instructions for an Independent Study-MYPLATE .GOVWeb-Quest 2012
1 3	3. Instructional Strategy 3_Summative Assessment 1_ Teacher will provide students with a scoring guide and directions for planning healthy meals on the MYPLATE.GOV website
1 3	4. Instructional Strategy 4_Summative Assessment 2_Teacher will provide students with a scoring guide and directions to make a visual representation of what a healthy plate would look like.
2 3	5. Instructional Strategy 5_Teacher will use direct instruction with the Nutrition PowerPoint
2	6. Instructional Strategy 6_ Teacher will provide directions and scoring guide for the Nutrient Poster project
2 3	7. Instructional Strategy 7_ Teacher will assess student Nutrient Poster presentations and provide the three (3)charts for students to complete as each student presents their project.
Obj.#	INSTRUCTIONAL ACTIVITIES: (What Students Do)
1 3	Instructional Activity 1_Formative Assessment - Students will complete a food journal and assess their diet on MYPLATE.GOV
1 3	2. Instructional Activity 2_MyPlate Web quest. Students will utilize the MyPlate.gov web site to determine their dietary guidelines, create a poster, PowerPoint or video.
1 3	Instructional Activity 3_Summative Assessments 1_Students will create a Menu Plan that meets their dietary needs as investigated on MYPLATE.GOV

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1 3	4. Instructional Activity 4_Summative Assessment 2_Students will create a visual representation of a healthy meal according to MYPLATE.GOV
2 3	5. Instructional Activity 5_Students will take notes over the Nutrition PPT
2 3	6. Instructional Activity 6_Students will create a Nutrient Poster, PPT, or video. Students investigate one specific nutrient and present to peers.
2 3	7. Instructional Activity 7_ Students will complete three (3) charts while each student presents their nutrient project.

UNIT RESOURCES: (include internet addresses for linking)

http://www.fcclainc.org/assets/files/pdf/programs/lessonplansactivities/identify_nutrient_sources.pdf

http://www.choosemyplate.gov/supertracker-tools/supertracker.html

http://www.moneytalksnews.com/2013/02/11/what-vitamins-do-you-really-need/?utm_source=newsletter&utm_campaign=email-2013-02-11&utm_medium=email

CCSS: Common Core State Standards (CCSS), accessed May 17, 2013, from http://www.corestandards.org/

CCTC: Common Career Technical Core (CCTC), accessed May 17, 2013 from http://www.careertech.org/career-technical-education/cctc/info.html

FCS: National Standards for Family and Consumer Sciences Education:, accessed May 30, 2013 from http://www.nasafacs.org/national-standards-home.html

NHS: National Health Education Standards (grades 9-12), accessed June 28, 2013 from http://www.cdc.gov/healthyyouth/sher/standards/index.htm

Resources@MCCE - AG DVD ROM 39 - Introduction to Biotechnology, CEV Multimedia, LUBBOCK, TX, CEV MULTIMEDIA. Scientists in plant, animal and human medical services discuss examples of cloning and transgenics--the removal and transplantation of genes into other organisms. Explore human tissue and organ replacement, nutrition augmentation in foods, pest and drought resistance for plants, disease

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treatment and many other possibilities of biotechnology. Computer-generated imagery and video microscopy helps to explain the potentially difficult and abstract concepts of the cell, the nucleus, chromosomes, DNA, genes, mitosis and meiosis. 31 minutes.

Resources@MCCE - AG DVD ROM 78.1 - Food Safety and Disease Prevention, Meridian Education Corporation, NEW YORK, NY, MERIDIAN EDUCATION CORPORATION, 2011. This program examines the risks facing consumers while highlighting culinary and food-handling methods for addressing food-borne illness outbreaks. Illustrating the dangers of food-borne bacteria and gastrointestinal viruses, the program also assesses the safety of pesticides, herbicides, hormones, and antibiotics used in agriculture. Food-preparation advice encompasses washing hands carefully, separating raw meat from produce, and cooking food thoroughly; on the nutrition side, the program promotes fruits, vegetables, and whole grains while suggesting an array of "superfoods." Viewers also learn about government agencies charged with ensuring food safety, including the FDA and the USDA, as well as those dealing with public health, such as the EPA and the CDC. Teacher's guide. 30 minutes.

Resources@MCCE - FCS 13.0000 L216.2 - 8th Grade Family & Consumer Sciences: 30 Lesson Plans-Family, Foods, Textiles; Learning ZoneXpress, OWATONNA, MN, LEARNING ZONEXPRESS, 2002. 30 lessons developed for middle school students. Teaches budgeting, housing, nutrition research, consumer decision making, cooking, and textiles skills. Teaching tips and techniques are also included. Appropriate for grade 8.

Resources@MCCE - FCS 20.0108 A532.2 - 50 Web-based Lesson Plans for Nutrition Classes, Colleen Angel, OWATONNA, MN, LEARNING ZONEXPRESS. Students can use instructions provided at websites to complete assignments and exercises.

Resources@MCCE - FCS 20.0108 D958 - Nutrition & Wellness, Roberta L. Duyff, PEORIA, IL, GLENCOE/MCGRAW HILL, 2000. Students learn responsible eating and exercise habits, understand nutrition guidelines, gather and evaluate information. Food preparation handbook included.

Resources@MCCE - FCS 20.0108 S755.1 - Games & Activities for Food Science and Nutrition Classes, Sunny Side Up, FT. ATKINSON, WI, NASCO, 2002. Innovative and unique curriculum resources are designed to raise the attention and interest of today's highly-visual student learners. Manual contains 50 various games and activities that can be used as introductions, closures to lessons, or as an entire lesson by themselves. Games include races, memory games, role playing, taste tests, scavenger hunts, team competitions, outdoor games, drawing games, and more. Grade 6 and up.

Resources@MCCE - FCS 20.0108 T763 - Successful Food Science Lesson Plans: 12 Units of Food Chemistry and More, Susan Turgeson OWATONNA, MN, LEARNING ZONEXPRESS, 2009. Lesson plans include 12 units of food science that cover a variety of topics. Activities and labs are designed to illustrate the practical application of food science in the "real" world. Projects and labs can be integrated into most food and nutrition courses. Units include: Careers in Food Science; Technology in Food Science; Scientific Method & Measurement; Sensory Evaluation;

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Food Safety; Compounds, Elements, & Mixtures; Molecular Activity & Heat Transfer; Acids & Bases; Carbohydrates, Fats, & Proteins; Biochemistry of Milk; Food Preservation; Food Processing.

Resources@MCCE - FCS CD ROM 3.2 - Hot Topics in Nutrition PowerPoint Presentation, Felicia Busch, OWATONNA, MN, LEARNING ZONEXPRESS, 2010. PowerPoint presentation covers a wide range of topics in the nutrition world, including the Vitamin D dilemma, food allergies, unhealthy vegetarianism, childhood obesity, food safety and more. Includes: PowerPoint presentation with presenter's script; Quiz; Related websites. Mac & Windows compatible. Created in Microsoft® PowerPoint, but do not need it to play or print slides. Appropriate for grades 6 –adult.

Resources@MCCE - FCS DVD ROM 1 - Eat Smart! MyPlate & 2010 Dietary Guidelines, Learning Seed, CHICAGO, IL, LEARNING SEED, 2012. Using MyPlate and the USDA's Dietary Guidelines, this program presents a practical overview of the basic concepts of healthy eating. Learn about the Guidelines' three main recommendations: eat nutrient-dense foods, balance calories, and reduce solid fats, added sugars and sodium. See how MyPlate helps you build meals that include nutritious and filling choices from all the food groups. Discover how eating smart and regular physical activity work together to provide a lifetime of good health. 29 minutes.

Resources@MCCE - FCS DVD ROM 1.1 - Teen Nutrition: What's the Big Debate?, Learning ZoneXpress, OWATONNA, MN, LEARNING ZONEXPRESS, 2007. Two high school classmates prepare for a debate on healthy eating, a nutritionist gives advice, and student interviews give a "real life" view of eating habits. From them we learn: the F-A-T-S method of eating and activity; the P-L-A-N method of changing bad eating/activity habits; why the Food Pyramid matters; how to use a hunger scale to control eating; how reading food labels can help teens make good choices. Grades 6 to Adult. 26 minutes.

Resources@MCCE - FCS DVD ROM 1.2 - Project Nutrition for Life, Learning Zone Express, OWATONNA, MN, LEARNING ZONE EXPRESS, 2008. Join a group of middle schoolers as they embark on a school project about making healthy food choices. Watch and learn along with the kids as they put the advice of their teacher to good use in a final report that teaches everyone that nutrition is a "Project For Life". Students will learn: How to use web-based resources effectively; The food pyramid; How foods affect our body; Using food labels to make healthy choices. Grades 6-8. 15 minutes.

Resources@MCCE - FCS DVD ROM 1.3 - Global Eating: Learning from Other Cultures, Learning Seed, LAKE ZURICH, IL, LEARNING SEED, 2003. What can we learn from other cultures about food and nutrition? Some countries share our love for food yet manage to avoid our epidemic of obesity. How do they do it? By studying how other cultures eat, we can gain some useful (and tasty) ideas to adapt to our own needs. Meet Contilo from Paros and learn how the Mediterranean diet combines a zest for good food with healthful eating and long lives. Discover from the Japanese that eating is a feast for the eyes as well as the stomach. Discover the roots of Mexican food and explore its healthy ingredients. Learn the Chinese concept of a balanced meal that involves a blend of tastes and textures as well as the yin and yang of the foods. A video about the

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joy of good food. 22 minutes

Resources@MCCE - FCS DVD ROM 1.4 - Diet and Disease in Modern Society, Meridian Education Corporation, MONMOUTH JCT, NJ, MERIDIAN EDUCATION CORP, 2004. This program investigates the relationship between diet and a number of frequently inter-related diseases and condition, including heart attack, stroke, high blood pressure, hardening of the arteries, obesity, Type 2 diabetes, and cancer. 36 minutes.

Resources@MCCE - FCS DVD ROM 1.7 - Obesity in a Bottle II: How to Pick Healthy Beverages, Learning Zone Express, OWATONNA, MN, LEARNING ZONE EXPRESS, 2010. Empty calories from sugar and fat found in many favorite beverages are adding inches to Americans' waistlines and may be contributing to rising rates of chronic disease. This program presents five segments offering suggestions for healthy beverage selections. Topics include: How to pick "good" drinks for kids; Best beverages if you're watching your weight; How to pick healthful beverages; How to pick the right drink for sports and athletic performance; Busting caffeine myths. Grade 9 to Adult. 26 minutes.

Resources@MCCE - FCS DVD ROM 1.8 - Eat Less: the Upside of Downsizing Portions, Learning Seed, CHICAGO, IL, LEARNING SEED, 2012. This program explores the USDA's recommendation to "eat less" and "avoid oversized portions." Discover why most people consume far more food and calories than they did in past decades, and how the quality of that food has changed. Learn how to consume fewer, yet more nourishing and satisfying calories. Get tips on downsizing portions and learn the important role exercise plays in eating less. 29 minutes.

Resources@MCCE - FCS DVD ROM 14.1 - Eater Beware! From Chemical Stews To Organic Gardens, Learning Seed, LAKE ZURICH, IL, LEARNING SEED, 2003. Food and risk. We are increasingly concerned about the safety of our food supply. Thousands seek organic foods they see are "safer" and free of potentially dangerous chemicals. What dangers lurk in our food supply? Is there a risk to fruits and vegetables doused in pesticides? In 2002, a new label appeared in grocery stores - USDA Organic. What does the new label mean? This timely and important program gives a foundation to help guide food choices and understand the revitalized interest in organic foods. Yes, it's about nutrition, but it's also about science and how to assess the risks of daily life. It deals with a crucial topic that should be taught in any foods/nutrition course. 22 minutes.

Resources@MCCE - FCS DVD ROM 2 - Personalizing MyPlate: Easy Changes for Eating Habits, Learning Seed, CHICAGO, IL, LEARNING SEED, 2012. This program shows how real people can easily modify and find healthier alternatives for their meals and snacks. Learn how the principles of MyPlate help people who are busy, comfort-food lovers, or non-cooks eat more fruits and vegetables, up their whole grains, vary their proteins, and limit fat, sugar, and sodium to create a healthier plate. 31 minutes.

Resources@MCCE - FCS DVD ROM 2.1 - Eat to Win: Nutrition for Athletes, Learning ZoneXpress, OWATONNA, MN, LEARNING ZONEXPRESS, 2006. Good nutrition at the top of an athletic training program will help gain the competitive edge. This video dispels 10 common nutrition myths with what to eat, when and why, using MyPyramid as the guide. Covers current, on-target nutrition information for athletes. Grades 6 -

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adult. 20 minutes. Teacher resources included.

Resources@MCCE - FCS VIDEO 159 - What Should We Eat? The Vegetarian Debate, Learning Seed, LAKE ZURICH, IL, LEARNING SEED, 2003. This video challenges all eaters to make decisions about food. Should people eat lots of meat? Just a little? None at all? Are vegetarians on to something or just a fringe group afraid to eat a creature that looks cute? Is meat a key part of a healthy diet or does it contribute to cancer and heart disease? It is easy to find extreme views on this subject, but what are the real issues? Will the future find a world in which we no longer need to use animals to survive, or will meat eaters rule the planet? This video suggests people need a reason TO eat meat just as vegetarians need a reason to avoid it. 21 minutes

Resources@MCCE - FCS VIDEO 242 - Nutrients: Their Interactions, Meridian Education Corporation, MOMMOUTH JCT, NJ, MERIDIAN EDUCATION CORP, 2004. This video takes a scientific look at dietary nutrients, explaining what they are, why the body needs them, and how they work with each other to produce energy, stimulate growth, repair and maintain hard and soft tissues, and regulate bodily processes. The impact of nutritional deficiencies on short and long-term health is also discussed. 21 minutes.

Resources@MCCE - FCS VIDEO 246 - Sport & Nutrition: An Extra Competitive Edge, NIMCO, Inc, CALHOUN, KY, NIMCO, INC, 2003. Explores the ways elite sports people use nutrition to give themselves an extra edge in training, competitiveness & physical recovery. Begins with a basic overview, looking in particular at the roles or individual nutrients in sports performance including: Carbohydrates, Fats, Protein, Alcohol, Water, Vitamins, Minerals, & Electrolyzes, Grade 9-Adult. 29 minutes.

Resources@MCCE - FCS VIDEO 311 - Nutrition and Your Menu: Making the Most of Your Menu, National Restaurant Association Educational Foundation, CHICAGO, IL, NATIONAL RESTAURANT ASSOCIATION EDUCATIONAL FOUNDATION, 1994. This program helps foodservice employees understand nutritious aspects of their menu items, and describe them in an appropriate manner. The viewer will observe the skills necessary to answer guests' nutritional concerns when dining out. 10 minutes.

Resources@MCCE - H DVD ROM 30.12 - Healthy Eating and Exercise: Putting It All Together with MyPlate.gov, Human Relations Media MT. KISCO, NY, HUMAN RELATIONS MEDIA, 2012. This program follows the USDA's latest Dietary Guidelines and introduces the new MyPlate concept—a brand-new graphic representation of the five food groups which visually helps teens understand the importance of appropriate portion sizes and nutrient-rich food choices. Viewers learn strategies for life-long health such as eating less, making at least half of their plate fruits and vegetables, cutting down on salt, drinking more water and making exercise a daily habit. The program emphasizes that a healthy diet should not mean cutting calories, but instead is centered around making the most beneficial food choices while avoiding an excess of salt, sugar and fats. Includes teacher's resource. Grades 7 - College.

Resources@MCCE - H DVD ROM 30.9 - Nutrition Myths and Facts, Human Relations Media, MT. KISCO, NY, HUMAN RELATIONS MEDIA, 2009.

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Today's teens are bombarded with confusing messages about nutrition. This program debunks the top ten nutrition myths and offers solid facts. By using a mix of real kid interviews, humorous fake commercials, and interviews with registered dietitians in an actual food lab, viewers learn about such things as how to read and understand food labels; why there is no magic potion for losing weight; tasty alternatives to junk food; and, how teens can eat healthier and be happier with their own body images. Viewers learn that skipping meals is a sure fire way to actually gain unwanted pounds, and how even a moderate amount of exercise can make a huge difference in their overall health and well being. Grades 7-College. 23 minutes.

Resources@MCCE - H DVD ROM 90 - Carbs: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This program describes carbohydrates, and why we need them. Describes how our bodies use carbs, how many we should eat each day, and which foods are healthier choices for carbs than others. Designed to help the viewer understand the role of glucose, fructose, sucrose, lactose and other sugars in the diet; why people who go on carb-reducing diets lose weight and why carbohydrates are a more efficient fuel than protein. Important facts about blood sugar, insulin, diabetes, and the glycemic index are also included. 22 minutes.

Resources@MCCE - H DVD ROM 90.1 - Fats: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This program explains why fat is so important to a person's diet. Discover the importance of lipids to good nutrition, the differences between various kinds of fat, and how fats relate to vitamins, hormones, energy, and our nervous system. Understand the consequences of consuming certain foods, and how to maintain a healthy, balanced diet. 22 minutes.

Resources@MCCE - H DVD ROM 90.2 - Minerals: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This program helps the viewer learn the names and functions of minerals, and which foods are the best sources to ensure proper nutrition. Explains the differences between vitamins and minerals, and what defines a mineral as "major" or "trace." Also, viewers can see how minerals behave in our bodies once we ingest them, as well as how they react with each other in many vital bodily functions. Program presents the questions: If minerals are good, why not take supplements? Which is best? More minerals or more balance? Is lead bad and iron good? (Surprise, both are essential AND both are toxic) Why calcium really makes bones stronger? Why the view that some chemicals are "bad" is simplistic. Why taking extra amounts of one mineral can "bump out" supplies of one another. 28 minutes.

Resources@MCCE - H DVD ROM 90.3 - Protein: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This program helps the viewer learn what a protein is and the foods that provide it, how our bodies process protein, the difference between high and low quality proteins, and the recommended intakes of this essential nutrient. Includes: Why humans are "protein vampires."; What are amino acids and why are they so crucial?; What is complete and incomplete protein?; How do we use protein?; What is the difference between animal and vegetable protein?; How do cows and carrots become people? 22 minutes.

Resources@MCCE - H DVD ROM 90.4 - Vitamins: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This

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program helps the viewer learn what vitamins are, and how they keep us healthy. Includes tips on the best ways to get all the vitamins needed. Explore the latest research about the dangers of "overdosing" on vitamins. Understand the signs of a vitamin shortage in your body. Discover whether vitamins can stop cancer, slow aging, or boost energy. And learn if we should take vitamins to counter stress, illness, or that "run down" feeling. 25 minutes.

Resources@MCCE - H DVD ROM 90.5 - Water: Elements of Human Nutrition, Learning Seed, CHICAGO, IL, LEARNING SEED, 2009. This program helps the viewer learn what water does for the body, from cell structure and joint lubrication to body temperature regulation and vitamin dissolution. Understand potential problems, such as what dehydration is and can do, and what water contamination means to third world countries and disaster areas. Learn what concerns surround water alternatives like energy drinks and sodas. Get recommendations for water intake daily and during exercise, where we get our water, and health regulations for purity, filtrations and additives. 30 minutes.

Resources@MCCE - H DVD ROM 90.6 - Basic Nutrition, Meridian Production, NEW YORK, NY, MERIDIAN EDUCATION CORPORATION, 2011. This program guides students through the basic concepts of healthy eating and the principal nutrients that keep the human anatomy functioning properly. Outlining the properties and benefits of carbohydrates, lipids, proteins, water, vitamins, and minerals, the program explains the difference between macronutrients and micronutrients, illustrates the functions of monosaccharides and disaccharides, highlights the virtues of whole grains, pinpoints the dangers of dehydration and vitamin deficiency, and presents eye-catching animation and in-depth commentary from nutrition experts clarifying each topic. The USDA's MyPlate food guidance system and dietary guidelines are also discussed. Includes teacher guide. 30 minutes.