

Southern Regional High School District Course of Study

Department **Family and Consumer Sciences**

Course Title: NUTRITION and FOOD PREPARATION

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Essential Questions of the Course:

- 1. Does nutrition and wellness education play a critical role in helping people improve their quality of life?**
- 2. What nutritional choices are beneficial to health promoting lifestyles?**
- 3. How does nutrition affect all components (physical, emotional, social, psychological and spiritual) quality of life?**
- 4. What is nutrition?**

Assessments:

- 1. Evaluate a given weight loss diet in all areas of nutrition.**
- 2. Develop a diet appropriate to a personal lifestyle.**
- 3. Teacher assessment through a test.**

Unit of Study

Unit Title: Food Habits: A Lifestyle Choice

Essential Questions of the Unit:

- 1. How do my food habits affect my wellness?**
- 2. What are the guidelines to shape healthy lifestyle choices?**
- 3. What do nutrition and wellness mean?**
- 4. What emotional, social, physical factors influence food choices?**
- 5. How does the process of digestion, metabolism and absorption affect wellness?**

Assessments:

- 1. Keep Daily Food diary – apply to each of the diet evaluations**
- 2. Discussion on emotional, social, physical, and spiritual aspect of food consumption.**
- 3. Teacher assessment through test**

Content:

Food Habits a Lifestyle Choice

A. Making wellness a lifestyle

- 1. Relationship between nutrition and health**
- 2. Define wellness**
- 3. Define nutrition**

B. Factors affecting food choices

- 1. Culture**
- 2. Social**
- 3. Emotions**
- 4. Agriculture**

C. Nutrient utilization

- 1. Nutrients**
- 2. Digestion**
- 3. Absorption**
- 4. Metabolism**

D. Guidelines

- 1. Recommended Dietary Allowance**
- 2. Dietary Guidelines for Americans**
- 3. Food Guide Pyramid**
- 4. Exchange System**

Skills:

Basic skills – scientific

Verbal skills – sharing diets and eating habits

Analytical skills – analyzing diets in several formats.

Purpose / Rationale of the unit:

The purpose of the unit is to make students more aware of their food habits. Students will gain skill in analyzing and developing general diets for a healthier lifestyle.

New Jersey Core Curriculum Content Standards:

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.1	All students will learn health promotion and disease prevention concepts and health-enhancing behaviors.
2.1.7	Describe a healthy adolescent, discuss injuries and illnesses common to this age group, and identify ways to prevent, reduce, or eliminate these health problems.
2.1.8	Explain how health is influenced by the interaction of body systems and nutritional intake.
2.1.9	Analyze how family, peers, culture, media, technology, and the environment affect wellness.
2.1.10	Identify and demonstrate health practices that support and enhance personal and family physical and mental health.
2.2	All students will learn health-enhancing personal, interpersonal, and life skills.
2.2.8	Analyze how health decisions and behaviors are influenced by family, peers, culture, and the media, and develop strategies that support effective decision-making and safe behavior.
2.2.16	Develop a plan for lifelong wellness using data from health assessments, family history, nutritional information, and current health practices, and evaluate progress towards meeting health goals in the plan.
2.6	All students will learn and apply health-related fitness concepts.
2.6.1	Identify the components of health-related fitness and describe activities related to each component.
2.6.6	Describe the components of health-related fitness and how each contributes to wellness.

SCIENCE

5.6	All students will gain an understanding of the structure, characteristics, and basic needs of organisms.
5.6.7	Identify the major systems of the human body and explain how their functions are interrelated.

SOCIAL STUDIES

6.5	All students will acquire historical understanding of varying cultures throughout the history of New Jersey, the United States, and the world.
6.5.17	Understand the multiple influences of gender, family background, religion, ethnicity, socioeconomic position, and nationality as the bases for analysis of individual identity.

Time Frame of Unit: Four to five weeks

Instructional Activities:

View videos on appropriate topics

Daily food diary

Food guide pyramid evaluation

Exchange method evaluations

RDA method of evaluation done on computer using nutrition program

Discussion of why we eat food.

Evaluation of nutrition articles

Materials and Resources:

Videos

Text: Nutrition and Fitness Chapters 1 through 4

Exchange systems

Food Works computer program

Unit of Study

Unit Title: Health Effects of Energy Nutrients

Essential Questions of the Unit:

- 1. What gives our body energy to perform tasks?**
- 2. Which nutrient is the best source of energy?**
- 3. Do these nutrients supply me with any other benefits besides energy?**
- 4. Are fats always bad for me?**
- 5. How do eating disorders affect my life and the lives of others that care?**

Assessments:

Evaluation of personal diets

Teacher based tests

Creation of diets which feature each of the energy rich nutrients

Content:

Health Effects of Energy Nutrients

A. Carbohydrates

- 1. Definition**
- 2. Functions**
- 3. Foods that supply carbohydrates**
- 4. Percentage of diet**
- 5. Glycogen loading**
- 6. Fiber**

B. Fats

- 1. Definition**
- 2. Functions**
- 3. Foods that supply fats**
- 4. Percentage of diet**
- 5. Health concerns such as heart disease**

C. Protein

- 1. Define**
- 2. Functions**
- 3. Foods that supply protein**
- 4. Percentage of diet**
- 5. Muscle mass – sports**
- 6. Vegetarian diet**
- 7. Eating disorders**

Skills:

Basic Skills – scientific, math and reading

Analytical skills – evaluating percentage of nutrients in diet.

Problem solving skills – developing diets

Social skills – cooperation in preparing vegetarian meals

Decision making – deciding on meals

Purpose / Rationale of the unit:

The purpose of the unit is to make the students aware of health concerns with the energy nutrients. Students will gain this skill by studying the functions of each of these nutrients and evaluating and developing diets that will promote personal health.

New Jersey Core Curriculum Content Standards:

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.1	All students will learn health promotion and disease prevention concepts and health-enhancing behaviors.
2.1.6	Identify common health products and foods found in the home and correctly interpret labels, information, directions, and warnings.
2.1.8	Explain how health is influenced by the interaction of body systems and nutritional intake.
2.1.10	Identify and demonstrate health practices that support and enhance personal and family physical and mental health.
2.1.15	Describe a healthy adult, discuss adult physical and mental health problems, and use health assessment data to develop strategies for reducing health problems and related risk factors.
2.1.16	Analyze the impact of genetic, nutritional, behavioral, cultural, and environmental factors on the functioning of body systems and use this information to identify responsible health practices.
2.2	All students will learn health-enhancing personal, interpersonal, and life skills.
2.2.16	Develop a plan for lifelong wellness using data from health assessments, family history, nutritional information, and current health practices, and evaluate progress towards meeting health goals in the plan.

MATHEMATICS

4.1	All students will develop the ability to pose and solve mathematical problems in mathematics, other disciplines, and everyday experiences.
4.1.8	Determine, collect, organize, and analyze data needed to solve problems.
4.1.11	Recognize, formulate, and solve problems arising from mathematical situations, everyday experiences, and applications to other disciplines.
4.3	All students will connect mathematics to other learning by understanding the interrelationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life.
4.3.10	Apply mathematics in their daily lives and in career-based contexts.

CAREER EDUCATION AND CONSUMER, FAMILY AND LIFE SKILLS

9.2	Demonstrate critical life skills in order to be functional members of society.
A	Critical Thinking
9.2.1	Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations.

Time Frame of Unit: Eight to ten weeks

Instructional Activities:

View Videos on appropriate topics
Learning Packets for Carbohydrates and Fats
Learning packet for Protein
Discussions on diets featuring carbohydrate, fat, and protein
Prepare high fiber foods
Prepare vegetarian menus and foods
Develop heart healthy diets
Evaluate percentage of nutrients in personal diets
Compare and contrast anorexia and bulimic diets

Materials and Resources:

Text: Nutrition and Fitness Chapters 5, 6, 7, 14

Learning Packets: Carbohydrate and Fat
Protein

Videos:

Food and Fat
Heart Healthy
Vegetarian
Anorexia

Unit of Study

Unit Title: The Work of Non-caloric Nutrients

Essential Questions of the Unit:

- 1. How do vitamins and minerals affect my body?**
- 2. Do vitamins and minerals give me energy if they do not provide calories?**
- 3. What vital functions do water supply for my body?**
- 4. If one supplement is good for me is two better?**
- 5. Where do vitamins and minerals come from?**

Assessments:

Critic value of vitamin supplements
Teacher tests
Analyze use of liquids in diet

Content:

The Work of Non-caloric Nutrients

A. Vitamins

- 1. Define**
- 2. Fat soluble vitamins**
- 3. Water soluble vitamins**
- 4. Supplements**

B. Minerals

- 1. Classification**
- 2. Macro-minerals**
- 3. Micro-minerals**
- 4. Supplements**

C. Water

- 1. Functions**
- 2. Keeping fluids in balance**

Skills:

Basic skills – reading, science

Thinking skills – evaluating use of vitamins and minerals

Analytical skills – determine value of supplements

Purpose / Rationale of the unit:

The student will be able to recognize the nutritional need for vitamins, minerals and water. They will examine the need for supplementation.

New Jersey Core Curriculum Content Standards:

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.1	All students will learn health promotion and disease prevention concepts and health-enhancing behaviors.
2.1.6	Identify common health products and foods found in the home and correctly interpret labels, information, directions, and warnings.
2.1.8	Explain how health is influenced by the interaction of body systems and nutritional intake.
2.1.10	Identify and demonstrate health practices that support and enhance personal and family physical and mental health.
2.1.16	Analyze the impact of genetic, nutritional, behavioral, cultural, and environmental factors on the functioning of body systems and use this information to identify responsible health practices.

LANGUAGE ARTS LITERACY

3.3	All students will write in clear, concise, organized language that varies in content and form for different audiences and purposes.
3.3.1	Use speaking, listening, reading, and viewing to assist with writing.
3.4	All students will read a variety of materials and texts with comprehension and critical analysis.
3.4.10	Identify passages in the text that support their point of view.
3.4.20	Analyze main ideas and supportive details.

CAREER EDUCATION AND CONSUMER, FAMILY AND LIFE SKILLS

9.2	Demonstrate critical life skills in order to be functional members of society.
A	Critical Thinking
9.2.1	Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations.

Time Frame of Unit: Three to three and a half weeks

Instructional Activities:

Appropriate videos

Read and evaluate Articles on vitamin and mineral usage

Compare and contrast vitamins and minerals

Prepare water-based recipes to incorporate water into the diet

Prepare diets with a variety of vitamins and minerals

Materials and Resources:

Video:

Vitamins and Minerals

Text: Nutrition and Fitness chapters 8, 9, 10

Articles from current magazines

Unit of Study

Unit Title: Nutrition Management: A Lifelong Activity

Essential Questions of the Unit:

- 1. Are nutrition needs the same during my lifetime?**
- 2. What type of diet would fit my lifestyle?**
- 3. How can I manage my energy needs (calories) to develop the body size I want to be?**
- 4. How can I determine if I'm under or over weight?**

Assessments:

Teacher based tests

Student evaluation of standard weight loss diet

Presentation of diet evaluation

Written essay on changing diet needs during the life cycle

Content: Nutrition Management:

A Lifelong Activity

A. Nutrition for all ages

- 1. Changing nutritional need**
- 2. Pregnancy and lactation**
- 3. Infancy and toddler**
- 4. Childhood**
- 5. Adolescence**
- 6. Adulthood**

B. Energy balancing act

- 1. Energy input**
- 2. Energy output**
- 3. Energy imbalance**
- 4. Determining healthy weight**

C. Healthy Weight Management

- 1. Factors affecting weight status**
- 2. Losing excess body fat**
- 3. Gaining weight**

Skills:

Basic skills – math and science

Analytical skills – determining body weight and diet

Thinking skills – ability to classify lifecycle nutritional needs

Purpose / Rationale of the unit:

Students will be better able to determine their dietary needs at different stages in their life. Students will also be better able to determine their body size and determine appropriate diets. An understanding of what calories are and how they function in the body will be approached.

New Jersey Core Curriculum Content Standards:

CROSS-CONTENT WORKPLACE READINESS STANDARDS

2 All students will use information, technology, and other tools.

2.4 Develop, search, and manipulate databases.

2.5 Access technology-based communication and information systems.

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.2 All students will learn health-enhancing personal, interpersonal, and life skills.

2.2.9 Describe how health goals are influenced by changes that occur throughout the life cycle.

2.4 All students will learn the biological, social, cultural, and psychological aspects of human sexuality and family life.

2.4.15 Describe the physical, emotional, and social changes that occur at each stage of human development, and the role of human sexuality throughout the life cycle.

2.6 All students will learn and apply health-related fitness concepts.

2.6.12 Design and evaluate a personal fitness plan, taking into consideration fitness, health and nutritional status, age, interests, and abilities, and discuss how the plan may be adapted to injury, illness, or aging.

SCIENCE

5.6 All students will gain an understanding of the structure, characteristics, and basic needs of organisms.

5.6.15 Explain how plants convert light energy to chemical energy.

5.6.16 Describe how plants produce substances high in energy content that become the primary source of energy for animal life.

CAREER EDUCATION AND CONSUMER, FAMILY AND LIFE SKILLS

9.2 Demonstrate critical life skills in order to be functional members of society.

A Critical Thinking

9.2.1 Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations.

Time Frame of Unit: Four weeks

Instructional Activities:

Calculate number of calories used in one day using several methods

Using 8 different methods, determine if you are over/under weight

Read several different methods of dieting

Evaluate a popular diet using the computer Foodworks program.

Exam pregnancy and lactation charts

Develop diets for different life cycles.

Materials and Resources:

Food Works computer program

Text: Nutrition and Fitness chapters 11,12, and 13.

Pregnancy models

Sheets for calculating calories and body size

Unit of Study

Unit Title: Other Aspects of Wellness

Essential Questions of the Unit:

- 1. Does what I eat affect my everyday performance and how I feel?**
- 2. What type of diet would I need to be the best I could be in sports?**
- 3. How does diet affect stress?**
- 4. Are drugs and alcohol influential in nutrition?**

Assessments:

Teacher generated test

Diet development for maximizing energy use.

Develop a diet for stress

Content:

Other Aspects of Wellness

A. Exercise: A way of life

- 1. Goals for physical activity**
- 2. Benefits of physical activity**
- 3. Exercise and heart health**

B. Eating for sports performance

- 1. Dietary needs of an athlete**
- 2. Energy needs**
- 3. Performance aids**

C. Maintaining positive social and mental health

- 1. Definition of social health**
- 2. Definition of mental health**
- 3. Positive life changes**
- 4. Help for health problems**

D. Stress and Wellness

- 1. Effects of stress on health**
- 2. Identifying stress**
- 3. Managing stress**
- 4. Preventing stress**

E. The use of alcohol and drugs

- 1. Drugs as medication**
- 2. Drug misuse and abuse**
- 3. Stimulants**
- 4. Depressants**
- 5. Help for substance abuse**

Skills:

Basic skills – reading, science

Thinking skills – analyzing reports and information

Purpose / Rationale of the unit:

This unit is to expose the student to how nutrition affects all aspects of their life from everyday stress to performance as an athlete. By examining this information, students will be able to select diets for wellness.

New Jersey Core Curriculum Content Standards:

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.2	All students will learn health-enhancing personal, interpersonal, and life skills.
2.2.11	Describe the impact of crisis, stress, rejection, separation, and loss, and develop coping strategies for each.
2.2.15	Analyze the impact of crisis, stress, rejection, separation, and loss on physical and emotional health that consider the influence of family, culture, and personal experiences.
2.3	All students will learn the physical, mental, emotions, and social effects of the use and abuse of alcohol, tobacco, and other drugs.
2.3.1	Define drugs and medicines, describe the purposes and correct use of medicines, and describe achievement of wellness.
2.4	All students will learn the biological, social, cultural, and psychological aspects of human sexuality and family life.
2.4.6	Describe the significant developmental milestones of each stage of human development , with emphasis on physical, emotional, and social changes of adolescence.
2.6	All students will learn and apply health-related fitness concepts.
2.6.12	Design and evaluate a personal fitness plan, taking into consideration fitness, health and nutritional status, age, interests, and abilities, and discuss how the plan may be adapted to injury, illness, or aging.

Time Frame of Unit: Two weeks

Instructional Activities:

Videos of sport and nutrition

Worksheets of nutrition and athletes

Survey students as to activity level

Survey students for stress level

Compare and contrast diets for athletes and nonathletes

Guest speaker – personal trainer

Journal of feelings and emotions as well as what they ate during this unit and evaluate it for relationship to stress.

Materials and Resources:

Video: Sports and Nutrition

Text: Nutrition and Fitness chapters 15, 16, 17, 18, and 19

Guest Speaker or a personal trainer in the area

Unit of Study

Unit Title: Making informed choices

Essential Questions of the Unit:

How can I prepare nutritional food that is appealing to me?

What procedures in the kitchen can insure safe food?

How can I develop menus that have a variety of taste, texture, and nutritional appeal?

Where would I purchase the food to prepare?

How do I make wise selections of prepared food?

Can I help with world food needs?

Are there any careers in the nutrition field that I could look into?

Assessments:

Teacher based tests

Teacher observations in the lab – kitchen

Development of menus

Essay on careers

Content:

Making Informed Choices

A. Keeping food safe

- 1. Food contaminants**
- 2. Food borne illness**
- 3. Public food safety**

B. Meal management

- 1. Planning for appeal**
- 2. Planning for nutrition**
- 3. Preparation techniques**
- 4. Time efficiency**
- 5. Meals away from home**

C. Making wise consumer choices

- 1. Where to shop for food**
- 2. Consumer food choices**
- 3. Food labels**
- 4. Consumer rights**

D. Nutrition and Health a global concern

- 1. World hunger**
- 2. Global solutions**

E. A career for you in Nutrition and fitness

- 1. Professionals**
- 2. Certification and license**
- 3. Positive career choice**

Skills:

Basic skills – reading, math and science
Interpersonal/relationship skills
Decision making skills
Problem solving skills

Purpose / Rationale of the unit:

Students will use their knowledge of nutrition practically by preparing meals that are appealing and nutritionally sound. They will be able to be wise consumers by reading and evaluating food labels and shopping in stores, which are best, suited to their personal needs. They will be exposed to the world nutritional status and be presented with a variety of careers in the field of nutrition.

New Jersey Core Curriculum Content Standards:

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.1	All students will learn health promotion and disease prevention concepts and health -enhancing behaviors.
2.1.6	Identify common health products and foods found in the home and correctly interpret labels, information, directions, and warnings.
2.1.8	Explain how health is influenced by the interaction of body systems and nutritional intake.
2.1.13	Examine health product and food labels and advertisements, comparing accuracy, content, directions, and value.

MATHEMATICS

4.1	All students will develop the ability to pose and solve mathematical problems in mathematics, other disciplines, and everyday experiences.
4.1.16	Recognize, formulate, and solve problems arising from mathematical situations, everyday experiences, applications to other disciplines, and career applications.
4.3	All students will connect mathematics to other learning by understanding the Inter relationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life.
4.3.10	Apply mathematics in their daily lives and in career-based contexts.

SCIENCE

5.5	All students will integrate mathematics as a tool for problem-solving in science, and as a means of expressing and/or modeling scientific theories.
5.5.2	Use a variety of measuring instruments, emphasizing appropriate units.
5.12	All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.
5.12.4	Evaluate the impact of personal and societal activities on the local and global environment.

CAREER EDUCATION AND CONSUMER, FAMILY AND LIFE SKILLS

9.2	Demonstrate critical life skills in order to be functional members of society.
A	Critical Thinking
9.2.1	Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations.

Time Frame of Unit: Ten weeks

Instructional Activities:

Preparation of nutritional food in a kitchen laboratory

Guest speaker - dietitian

Foodborne illness jeopardy game

Measurement match

Develop menus for different wellness issues

Prepare menus for different wellness issues

Compare labels

Visit ACCC – culinary institute

Visit a restaurant to evaluate appeal

Use the supermarket fliers to plan a weekly menu

Report on world nutritional concerns

Materials and Resources:

Text: Nutrition and Fitness chapters 20, 21, 22, 23, 24, and 25

Videos – safety

Internet for world nutrition

Variety of food labels

Food labs