

Ninth-Twelfth Grade

Comprehensive Health Strands:

Community/Environmental Health (C)	Nutrition (N)
Personal Health (PH)	Consumer Health (CH)
Human Growth and Development (H)	Mental Health (M)
Disease Prevention and Control (D)	Safety and First Aid (S)
Drug Abuse Prevention (DA)	Family Life (F)

Competencies and Suggested Objectives:

- 1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**
 - a. Identify the harmful physiological and psychological effects of stress.
 - b. List and describe types of mental disorders.
 - c. Describe the transmission, symptoms, treatment, and prevention of communicable, non-communicable and sexually transmitted diseases.
 - d. Describe the etiology and control of the AIDS virus.

- 2. Demonstrate the ability to obtain valid health information. (CH, PH, C)**
 - a. Explain the importance of keeping family medical records.
 - b. Differentiate between nonprofessional and professional medical services.

- 3. Demonstrate the ability to practice health-enhancing behaviors and reduce health risks. (S, D, N, M, DA)**
 - a. Evaluate how environmental health problems impact personal and community health.
 - b. Identify websites regarding sources that provide valid health information.
 - c. Relate connections between human and environmental factors to the risk of accidents.
 - d. Demonstrate basic first aid procedures.
 - e. Describe how individuals can help reduce the misuse and abuse of drugs.
 - f. Explain how drugs and medicines have affected the life span of human beings.
 - g. List future positive effects of drugs and medicines on society.
 - h. Compare or identify the interrelationship between the amount of food consumed to obtain ideal weight and the amount of food consumed in obese individuals.
 - i. Identify the relationship between psychological factors and eating disorders.
 - j. Identify available resources for treatment of mental illness.
 - k. Explain other measures for at-risk behavior involving communicable diseases.

- 4. Analyze the influence of culture, media, technology, and other factors on health. (C, CH, P)**
 - a. Evaluate the implications of modern technology on societal health.
 - b. Analyze the influences of different cultural beliefs on health behaviors.

- 5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)**
 - a. Define the role of the family in the transmission of values, attitudes, behavior, personalities, and responsibilities of its members.
 - b. List several types of defense mechanisms and discuss their limitations in solving problems.
 - c. Discuss conflict resolution styles and components of communication that can aid in resolving conflicts.
 - d. Describe situations that could cause conflicts and problems within a family.

- 6. Demonstrate the ability to use goal-setting and decision-making skills to enhance health. (N, PH DA, F, M, H, S, D)**
 - a. Interpret the role of nutrition and nutrients in maintaining health.
 - b. Examine the costs associated with healthcare.
 - c. Identify the activities and groups that protect the consumer.
 - d. Explain the process of human reproduction from conception to birth.
 - e. Utilize a decision-making model to identify reasons for abstaining from pre-marital sexual activity.
 - f. Define a value system and identify the relationship of values to actions.
 - g. Demonstrate the ability to work cooperatively with others to avoid potentially harmful situations.
 - h. Develop and implement a plan for increasing personal safety at home, work, and/or school.

- 7. Demonstrate the ability to advocate for personal, family, and community health. (C, CH, F, S, D)**
 - a. Develop and implement a campaign to influence and support others in making choices that reduce the risks of intentional or unintentional injury.
 - b. Demonstrate the ability to work cooperatively when advocating for healthy individuals.
 - c. Illustrate how drug use, misuse, and abuse cause problems in society.

Ninth-Twelfth Grade

Competencies

1. Comprehend concepts related to health promotion and disease prevention. (D, PH, M, N, C, H)

3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (S, D, N, M)

6. Demonstrate the ability to use goal-setting and decision-making skills to enhance health. (N, F, PH, H, D, M, S)

Integrated instruction (with strands)	Grade/ Competency / Objective	Suggested Teaching Strategies	Suggested Assessment Methods
Health Science: Life Language Arts: Viewing, Writing Math: Data analysis, Number sense, Measurement	1c. 3b. 6a.	<p>Students will access the following websites: Females – http://www.cdc.gov/powerfulbones/stayingstrong/index.html Males- http://www.calciuminfo.com/lifestages/men.aspx</p> <p>Students will compose an essay from research found on calcium. The paper should be gender specific. For example, it should be titled “Why is Calcium an Important Mineral for Males?” or “Why is Calcium an Important Mineral for Females?”</p> <p>Students will include how much calcium consumed by keeping a calcium diary on the poster sheet provided by 3 –a-day website http://www.3aday.org/</p>	<p>Rubric for essays</p> <p>Feedback after diary check</p>

		<p>Students will calculate percentages of calcium in daily caloric intake and keep a log of the calcium percentages for a week.</p> <p>Enrichment/Acceleration: Students will research the effects of osteoporosis and create a visual model of a person suffering from the degenerative disease as three preventative methods.</p> <p>Remediation: Students will use the internet to determine the recommended daily calcium intake for males and females. Students will chart their calcium intake for one week and determine whether calcium consumption is sufficient.</p>	<p>Verbal Feedback after log Graded by Rubric. See appendix.</p> <p>Completion of activity rubric in Appendix check</p>
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Competencies:

- 1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**

- 3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)**

- 4. Analyze the influence of culture, media, technology, and other factors on health (C, CH, P)**

- 7. Demonstrate the ability to advocate personal, family, and community health. (C, PH, F, H, S)**

Integrated Instruction	Grade/ Competency/ Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Language Arts: Reading, Writing, Speaking, Listening</p> <p>Science: Life Science</p>	<p>9-12</p> <p>1c</p> <p>3b</p> <p>4a, 4b</p> <p>7a,b</p>	<p>Teacher will use a K-W-L (know-want to know-learn) chart to determine what students know and would like to know about the effects of having too little folic acid during pregnancy.</p> <p>In small groups, students will research the information indicated in the "W" section of the K-W-L chart. Students will present the information via a self-selected visual or written product.</p> <p>For reference materials students may use the following websites:</p> <p>(case study about folic acid from Texas) http://www.cdc.gov/ncbddd/folicacid/excite/default.htm</p> <p>http://www.nutritionexplorations.org/</p> <p>Enrichment: Students will collaborate with computer or media arts teacher to create a video highlighting the positive effects of consuming folic acid during pregnancy.</p> <p>Remediation: Students will create visual representation comparing and contrasting the pros and cons of consuming healthy doses of folic acid during pregnancy.</p>	<p>Teacher observation</p> <p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Visual or written product. Graded based on rubric. See appendix.</p>

Sample K-W-L Chart

Know (Pre-Assessment)	Want to Know	Learned (Post-Assessment)

Ninth Grade - Twelfth Grade

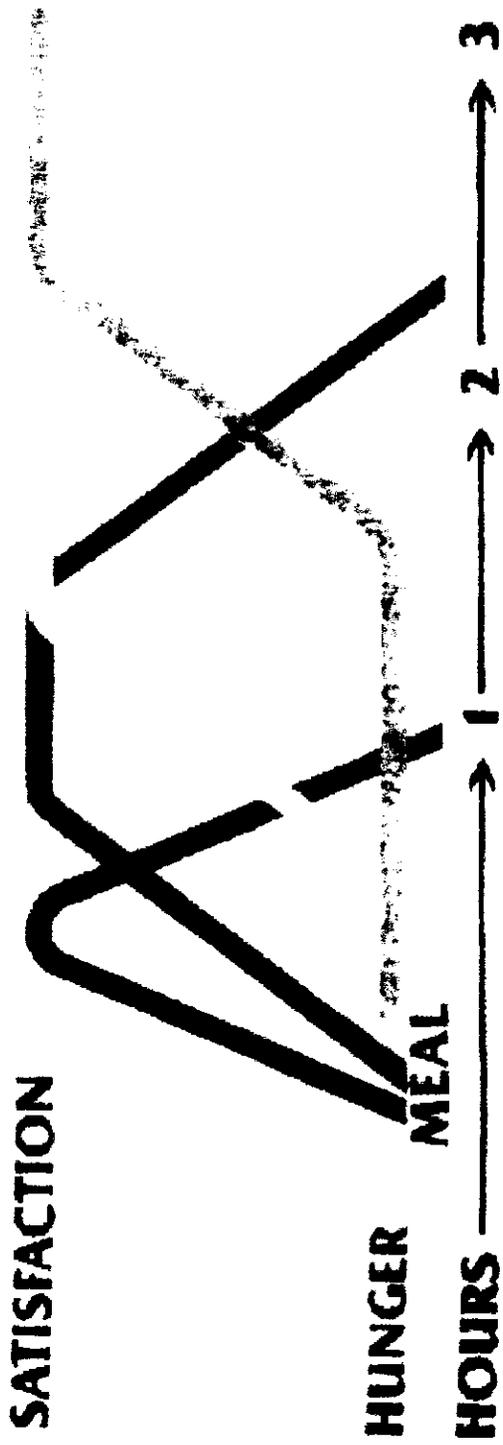
Competencies:

3. **Demonstrate the ability to practice health-enhancing behaviors and reduce health risks. (S, D, N, M, DA)**
4. **Analyze the influence of culture, media, technology and other factors on health. (C, CH, P).**
6. **Demonstrate the ability to use goal setting and decision making skills to enhance health. (N, PH, DA, F, M, H, S, D)**

Integrated Instruction (with strands)	Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Math: Number sense, Measurement</p> <p>Language Arts: Reading, Listening, Speaking</p>	<p>3 a.</p> <p>3 b.</p> <p>3 h.</p> <p>4 b.</p> <p>6 a.</p>	<p>Students will discuss their personal health habits and their responsibility in achieving a better quality of life. Students will use the following website to determine the amount of calories that are needed to maintain their current body weight. www.MyPyramid.gov.</p> <p>Students will determine their body mass index (BMI) by using an online calculator to evaluate the healthfulness of their current body weight.</p> <p>Enrichment/Acceleration: Students will compare fat and caloric content of various food items at eight to ten popular fast food restaurants. Students will use Microsoft Excel to display findings in a spreadsheet to compare the items.</p> <p>Remediation: Students will brainstorm ways in which they can maintain a healthy weight/BMI. Students will compare the information gained from the web site to the handout from the USDA and become familiar with the servings for each category.</p>	<p>Teacher Observation from rubric.</p> <p>Teacher Observation</p> <p>Written Product Rubric</p>

SATISFACTION FROM CONSUMING

SUGAR STARCH PROTEIN FAT



Ninth Grade - Twelfth Grade

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1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)

3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)

5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p> <p>Language Arts: Writing, Listening, Speaking</p>	<p>1c. 2a. 3b. 3h. 4a. 6a. 6b. 7b.</p>	<p>Students will identify health problems (high blood pressure, cancer, diabetes, etc.) that may be caused from poor nutritional habits. www.cdc.org.</p> <p>Using a journal, students will record food intake and exercise habits to include time spent exercising for a seven day period. Upon completion of journal entries, students will reflect upon the foods consumed and amount of time spent exercising to determine if their habits are healthy or unhealthy based on CD standards.</p> <p>Enrichment/Acceleration: In small groups, students will contact the local health department to research a disease that is normally caused from poor nutritional habits. Students will ascertain the causes and effects of the disease. Students will present highlights of research to the class using a self-selected product.</p> <p>Remediation: Students will complete a nutritional newsletter that will inform parents and teachers of healthy habits that will increase their quality of life.</p>	<p>Teacher observation Graded based on rubric. See appendix.</p> <p>Journal</p> <p>Presentation rubric. See appendix.</p> <p>Written product rubric. See appendix.</p>

Ninth Grade - Twelfth Grade

Competencies:

3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)

4. Analyze the influence of culture, media, technology, and other factors on health. (H, CH, C, PH, M)

6. Demonstrate the ability to use goal setting and decision making skills to enhance health (Ph, N, H, F, D)

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Language Arts: Listening, Viewing, Speaking</p> <p>Science: Life</p>	<p>3h. 3i. 4b. 6a. 6b.</p>	<p>Teacher will discuss the habits of healthy individuals, such as learning how to read food labels. Students will analyze how correctly and frequently reading food labels is conducive to making healthy choices. http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/shop_1st.htm (handout available for nutritional label)</p> <p>Teacher will display or distribute a nutritional facts label in order to generate a greater understanding of serving sizes and servings per container. Based on products brought for lunch or snack, students will compare and contrast nutritional products and unhealthy products by way of a journal entry.</p>	<p>Teacher Observation Graded based on rubric for participation.</p> <p>Written product rubric. See appendix.</p>
		<p>Enrichment/Acceleration: In small groups, students will create a new food. Using the labels presented during whole group discussion as a guide, students will design a nutritional label for this product. Students will consider target marketing audience while designing the label.</p>	

		<p>Remediation: Students will use the following website to determine the number of servings consumed during one meal: http://www.dairycouncilofca.org/activities/quiz/acti_calc.asp</p> <p>This exercise (see attachment) includes the number of servings they consumed per meal, such as from one 8 ounce serving of chocolate milk, 1 cup of broccoli, etc.</p>	<p>Calcium Quiz</p>
		<p>Teacher will reemphasize the importance of portion control and discuss the role that our environment plays in portion sizes. Students will visit http://hin.nhlbi.nih.gov/portion/keep.htm to participate in an exercise on portion distortion.</p>	<p>Menu planner from web site.</p>

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1. **Comprehend concepts related to health promotion and disease prevention. (D, PH, M, S, N, C, H)**

3. **Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (S, D, N, M)**

6. **Demonstrate the ability to use goal-setting and decision-making skills to enhance health. (N, F, PH, H, D, M, S)**

Integrated instruction	Grade/Competency/Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Math: Data analysis, Number sense</p> <p>Social Studies: Geography</p> <p>Language Arts: Viewing, Writing, Reading</p>	<p>1c. 3h. 6a.</p>	<p>Students will access the following website: www.ba.ars.usda.gov/cnrg/services/cnmapfr.html</p> <p>After accessing the Action for Healthy Kids Community Mapping project, students will compare Mississippi dietary statistics to another state in the northern, eastern, western and southern regions of the United States.</p> <p>Student will make a comparison chart of three statistical facts for these four states. The student will write a brief essay on different factors that may influence the variability in statistics across states.</p>	<p>Rubric for essays</p> <p>Feedback after checking statistical comparisons</p>

		<p>Remediation: Students will research different diseases (anorexia nervosa, cardiovascular diseases, etc.) that are the outcomes of unhealthy lifestyles. www.americanheartassociation.com www.anred.com/hltheat.html www.cdc.org</p>	<p>Teacher observation based on rubric. See appendix.</p>
		<p>Enrichment/Acceleration: In groups, students will create a short skit designed to convince classmates why it is important to partake in a healthy lifestyle. OR</p>	<p>Grade based on rubric for group work or presentation. See appendix.</p>
		<p>Students will create a bumper sticker promoting a healthy lifestyle designed to increase the awareness of a better quality of life.</p>	<p>Bumper sticker graded using on visual product rubric.</p>

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1. **Comprehend concepts related to health promotion and disease prevention. (N, PH, D)**

6. **Demonstrate the ability to use goal setting and decision making skills to enhance health. (N, PH, F, M, H, D)**

7. **Demonstrate the ability to advocate for personal, family, and community health. (C, CH, F, S, D)**

Integrated Instruction (with strands)	Grade/ Competency/ Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p> <p>Language Arts: Listening, Reading</p> <p>Social Studies: Economics</p>	<p>1c. 6a. 7b.</p>	<p>Teacher will present lesson on choosing whole grains (attached). The lesson explains the health benefits of fiber, and the identification of whole grain products.</p> <p>Students will discuss the incidence of heart disease and colon cancer in their families and role of fiber in decreasing the risks of these diseases.</p> <p>Students will read the labels of whole-grain products and their refined counterparts and discuss the criteria for choosing whole-grains.</p> <p>Students will research the internet, cookbooks, and family sources to identify recipes that are rich in whole grains. The students will compile a "Whole Grains Recipe Booklet" to share with their families.</p> <p>Enrichment/Acceleration: In small groups, students will create a marketing campaign designed to influence teenagers to consume more whole grains.</p> <p>Remediation: Students will compare and contrast three similar products made with whole grain with three products made with refined flour products in terms of nutritional value and cost.</p>	<p>Teacher observation graded based on rubric. See attached.</p> <p>Teacher observation</p> <p>Recipe graded based on ingredients list & fiber content.</p>

Choosing Whole Grains

Objective:

At the end of this lesson, the student will be able to explain the health benefits of including fiber in the diet and to identify foods that are rich in whole grains.

Materials:

Nutrition Facts Labels:

- whole wheat bread (100% whole wheat on the label)
- refined bread product
- bran cereal (more than 4 grams fiber)
- breakfast cereal (less than 4 grams fiber)
- brown rice
- white rice

Lesson:

The new Dietary Guidelines and MyPyramid recommend that you make half of your grains whole. This means that you should strive to eat at least 3 oz of whole-grain cereals, breads, crackers, rice, or pasta every day.

Whole grain products provide more nutrients and fiber than their refined versions. There are two categories of fiber with unique health benefits: soluble and insoluble.

Soluble refers to the ability of fiber to dissolve in water. Soluble fiber absorbs water, swells, and slows the passage of digestive matter. This type of fiber helps you to feel fuller after a meal and may help with weight management by curbing your appetite.

Soluble fiber (found in oats, oat bran, brown rice, other grains, fruits, vegetables and dried beans and peas legumes) can help lower cholesterol levels. The health benefit of lower cholesterol levels is that it reduces the risk of heart disease.

Insoluble fiber cannot dissolve as well in water. This type of fiber increases and softens stools and increases the passage of digestive matter. Insoluble

fiber (found in wheat bran, corn bran, whole wheat breads and cereals, fruits, and vegetables) promotes regularity. The health benefit of regular bowel movements is that it decreases risk for colon cancer.

Trying to get more soluble and insoluble fiber in your diet may seem like too much to think about. Don't sweat it; many foods contain both types of fiber. If you eat a variety of fiber-rich foods, you will get the health benefits from both types of fiber.

When you decide that you want to increase the fiber in your diet, remember to do so gradually. Your gastrointestinal (GI) tract will need time to adjust. Begin with 20 grams of fiber each day for a week or so, and then add 5 grams per day each week thereafter until you reach the fiber recommendations that are appropriate for you. Go to MyPyramid.gov to figure an amount that is right for you. It is also important to drink plenty of fluids as you add fiber to your diet. You will need this extra fluid for the fiber to dissolve in your GI tract. The extra fluid will keep you from becoming dehydrated and keep things moving along.

Use the nutrition facts labels listed above to illustrate the following points about increasing fiber in the diet by choosing whole grains:

- Read the nutrition label on grain products. Foods that are good sources of fiber will have at least 2.5 grams per serving. Foods that are high in fiber will have 5 grams per serving.
- To choose whole grain breads, look for whole wheat or whole grains as the first ingredient on the ingredient list. A product that states 100% whole wheat (or 100% whole grain) will be a good choice as well. If you see enriched flour on the list of ingredients, then the bread is not a whole grain product.
- To choose cereals that are rich in fiber, look for those that provide 4 grams of fiber per serving or more.
- Choose brown rice over enriched white rice and try grains that are new to you like barley, bulgur wheat, couscous. These are fiber-rich whole grains.

Evaluation:

Immediately after the lesson the students will discuss the incidence of heart disease and colon cancer in their families and the significance of the lesson in reducing their risks of these diseases.

Students will demonstrate the retention of their knowledge of whole grains by finding recipes that include whole grains. One week after this lesson, each student will hand in one recipe that they have printed from the computer, photocopied, or neatly written from internet sources, cookbooks, or family recipes. Recipes that provide nutrition facts are highly encouraged, as are recipes that have been tested with favorable results. The instructor will evaluate the recipes and assign the compilation of the appropriate recipes into a packet so that each student will have a "Whole Grains Recipe Booklet" for their family.

References:

Bauer J. (2003). *The Complete Idiot's Guide to Total Nutrition, 3rd edition.* Alpha Books: Indianapolis, IN.

Whitney E and Rolfes S. (2005). *Understanding Nutrition, 10th edition.* Thomson/ Wadsworth: Belmont, CA.

This lesson was developed by Rebecca Kelly, PhD, RD, LD. Assistant Professor of Culinary Arts at Mississippi University for Women. July 26, 2005.

Ninth Grade - Twelfth Grade

Competencies:

1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)
3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)
6. Demonstrate the ability to use goal-setting and decision making skills to enhance health. (N, PH, DA, F, D)
7. Demonstrate the ability to advocate personal, family, and community health. (C, CH, F, S, D)

Integrated Instruction	Grade/ Competency/ Objective	Suggested Teaching Strategies	Suggested Assessment Methods
Health Science Art Language Arts	1c. 3h. 6a. 7a.	<p>Teacher will discuss with students the importance of calcium and the role it plays in the body. Students will compare foods that are high in calcium to those that are low in calcium. http://www.dairycouncilofca.org/edu/edu_prog_eyo_bone5.htm Students will complete exercise to determine the number of servings they consumed of High Calcium foods and Medium Calcium foods.</p> <p>Teacher will discuss with students bone building exercises and students will complete a quiz to determine bone building exercises. Quiz found at: http://www.dairycouncilofca.org/edu/edu_prog_eyo_bone5.htm</p> <p>Students will develop an ad campaign to promote the consumption of high calcium foods along with bone building exercises, for example, "Got Milk" Campaign.</p>	<p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Calcium activity</p> <p>Quiz</p> <p>Ad Campaign</p>

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4. Analyze the influence of culture, media, technology and other factors on health. (C, CH, PH)

7. Demonstrate the ability to advocate personal, family, and community health. (C, CH, F, S, D)

Integrated Instruction	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health Science Art Language Arts Computer</p>	<p>1c. 3h. 3i. 4a. 7a.</p>	<p>Teacher will prompt students with the written question: "What do individuals do in their quest for the perfect body?"</p> <p>Students will compare and contrast different types of eating disorders and the results of continuous unhealthy eating habits (weight gain, anorexia nervosa, bulimia, binge eating, yo-yo dieting, etc)</p> <p>www.dairycouncilofca.org/edu_prog_boddy4.htm www.cdc.org</p> <p>Students will research to determine the risk factors of eating disorders and the identifiable symptoms of the disorders.</p> <p>Students will create a brochure, poster, or skit to educate others of eating disorders and the consequences of these diseases. Students will include a section notifying others of opportunities for help and treatment.</p> <p>Students will compose a research paper detailing different eating disorders, where how our culture promotes unhealthy eating habits through advertisement, media, etc.</p>	<p>Journaling</p> <p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Brochure, poster, or skit graded by rubric. See appendix.</p> <p>Research Paper Graded by rubric.</p>

Ninth Grade – Twelfth Grade

Competencies:

6. Demonstrate the ability to use goal setting and decision making skills to enhance health. (N, PH, DA, F, M, H, S, D)

7. Demonstrate the ability to advocate for personal, family, and community health. (C, CH, F, S, D)

Integrated Instruction	Grade/Competency/Objective	Suggested Teaching Strategies	Suggested Assessment Methods
Health Science Language Arts Computer	6a. 7a.	<p>Teacher will present lesson on multivitamin/mineral supplements (attached). The lesson explains situations where supplements are needed, criteria for choosing a supplement, and cautions about supplements.</p> <p>Students will determine whether they need to consider taking a supplement by completing the “Do You Need A Multivitamin/Mineral Supplement?” quiz. (http://www.eatright.org/Public/NutritionInformation/92_11835.cfm)</p> <p>Students will read the label on a bottle of multivitamin/mineral supplement and discuss the criteria for choosing a supplement.</p> <p>Students will test the absorbability of a multivitamin/mineral supplement.</p> <p>Students will write a short essay that discusses whether or not they need to take a supplement, cites the points of the lesson to support their assessment, and explains how to choose a supplement.</p>	<p>Teacher observation graded based on rubric. See attached.</p> <p>Teacher observation</p> <p>Teacher observation</p> <p>Essay graded on content, organization, grammar, and punctuation.</p>

Multivitamin/Mineral Supplements

Objective:

At the end of this lesson, the student will be able to determine whether he or she needs to take a multivitamin/mineral supplement and to describe how to choose a supplement.

Tools:

Bottle of generic multivitamin/mineral supplement

Clear plastic cup

Household vinegar

Handout: Multivitamin/Mineral Supplement Facts

Handout: Do You Need a Multivitamin/Mineral Supplement?

(<http://www.eatright.org/Public/NutritionInformation/9211835.cfm>)

Lesson:

The best way to get the vitamins and minerals you need each day is from the foods you eat. In addition to vitamins and minerals, foods provide energy and other substances that are beneficial to health. It is not possible to pack these beneficial substances from foods into supplements.

There are some cases, however, when taking a supplement will be a good idea. And, it won't hurt most people to take a multivitamin/mineral supplement that supplies 100 percent of the Recommended Dietary Allowances (RDAs).

Discuss the reasons supplements may be needed using the "Multivitamin/Mineral Supplement Facts" Handout:

- If you skip meals, are on a fad diet, or eat fewer than the minimum servings from each of the food groups recommended for you by MyPyramid, you might benefit from a multivitamin/mineral supplement.
- If you are a vegan, that is you eat absolutely no meat, dairy, or other animal products, you might benefit from vitamin B₁₂ and/or calcium supplements.
- If you avoid specific types of food because of food allergies, food intolerances, or dislikes, you might benefit from supplements of specific nutrients these foods provide.

- If you are a woman who capable of becoming pregnant, you will benefit from a folate supplement. {In fact, it is a good idea for women who may become pregnant to take a multivitamin/mineral with 100% of the RDA for folate. This will protect against having a baby with neural tube defects.}

Continue using the handout. Also, use the multivitamin/mineral supplement, cup, & vinegar to explain and demonstrate the following:

- It is important to choose a supplement that is of good quality, but it is not necessary to buy an expensive brand.
- When choosing a multivitamin/mineral supplement read the label to make sure it supplies 50-150% of the Daily Values for each nutrient.
- Look for USP on the label. This is considered a seal of approval for supplements. USP (U.S. Pharmacopeia) is a nonprofit testing organization that tests vitamin and mineral supplements for strength, quality, purity, and dissolution. It has been operating since 1820.
- To test the absorbability of a supplement, place it in a container (cup) and cover it with household vinegar. Stir the solution every few minutes, if desired. The pill should disintegrate, and may completely dissolve, within one hour. If it does not disintegrate in the vinegar, it may not disintegrate in the stomach, meaning it will pass through undigested. {This test is only a rough approximation of what happens in the stomach.}

Continue using the handout to discuss cautions about supplements:

- Think about supplements as though they are medicine. It is important not to take too many supplements. It is easier to ingest toxic amounts of nutrients from supplements than it is from food, and taking too many high-dose supplements can cause the nutrients to interfere with one another.
- Taking supplements can give people a false sense of security. They may think that the supplements will cover their nutrient needs and that they do not have to make good food choices. In addition, they may think that supplements will cure their medical illnesses.
- You do not need to take supplements because the food supply is inadequate; the soil in which food is grown and the food supply provide adequate nutrients. Supplements will not provide energy, enhance athletic performance, build lean tissue, reduce stress, or prevent diseases.

Evaluation:

After the lesson, the students will complete the quiz "Do You Need a Multivitamin/ Mineral Supplement?" Students will write a short essay that (1) discusses whether or not they think they need to take a supplement, (2) cites their quiz results and lesson discussion to support their assessment, and (3) explains how to choose a supplement.

References:

American Dietetic Association - Do You Need a Multivitamin/Mineral Supplement?

http://www.eatright.org/Public/NutritionInformation/92_11835.cfm

Bauer J. (2003). *The Complete Idiot's Guide to Total Nutrition, 3rd edition*. Alpha Books: Indianapolis, IN.

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Who Are The People That Need Supplements?

- People who do not eat enough (< 1200 calories/day) need a multivitamin/mineral supplement
- People who eat all-plant diets (vegans) need vitamin B₁₂ and calcium
- People with lactose intolerance, milk allergies, or not enough dairy need calcium
- People with known nutrient deficiencies need those specific nutrients
- Infants need iron & fluoride
- Women of capable of becoming pregnant need folate
- Women who bleed excessively during menstruation need iron
- Pregnant women need iron
- Elderly people need vitamin D

How To Choose Supplements

- First, improve the diet by making more nutritious food choices
- If nutrients needs cannot be met from the diet, take a

multivitamin/mineral supplement with 50-150% of the Daily Values for each nutrient

- **Look for USP, which means US Pharmacopeia, on the label**
- **USP sets standards for quality, strength, and purity**
- **A supplement should completely disintegrate within 30-45 minutes**
- **Local or store brands may be just as good as nationally advertised brands.**

Reasons People Need To Be Careful About Supplements

- **Risk of toxicity**
 - **It is easier to get too much of a nutrient from supplements compared to nutrients in food**
 - **Flavored chewable supplements entice children to eat supplements like candy**
- **People may think a supplement will treat their illnesses instead of getting medical help**
- **People eat poor diets because they believe supplements will cover their nutrient needs**
- **Nutrients in pure concentrated forms are more likely to interfere with absorption of other nutrients compared to nutrients in foods**

Claims About Supplements That Are Not True

- **The food supply and soil in which food is grown do not contain enough nutrients**
- **Supplements can provide energy**
- **Supplements can enhance athletic performance or build lean tissue**
- **Supplements will help one to cope with stress**
- **Supplements can prevent, treat, or cure conditions ranging from the common cold to cancer**

Ninth Grade - Twelfth Grade

Competencies:

5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)

6. Demonstrate the ability to use goal setting and decision making skills to enhance health. (N, PH, DA, F, M, H, S, D)

7. Demonstrate the ability to advocate for personal, family, and community health. (C, CH, F, S, D)

Integrated Instruction	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p>	<p>5c. 5d. 6g. 7a.</p>	<p>Students will compare and contrast the effects that alcohol has on the body using a Venn diagram.</p> <p>Students will analyze multiple ways that peer pressure relates to driving while under the influence. Teacher will list responses on the board.</p> <p>Teacher will display statistics of fatalities in automobile crashes involving at least one intoxicated driver or no occupant. See attachment. www.library.thinkquest.org/23713/problem/thevictims.html</p> <p>Students to complete a quiz on drinking and driving.</p> <p>Remediation: Students will compile a written report addressing positive ways to handle peer pressure related to alcohol and drugs.</p>	<p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Drinking and Driving Quiz</p> <p>Written Report Graded based on rubric. See appendix.</p>

Drunk and drugged driving affects

- a. Alcoholics
- b. Teenagers
- c. Everybody

2. Even if you are not driving drunk, you can be involved in an alcohol-related accident.

- True
- False

3. Why is driving under the influence of alcohol and other drugs such a large problem?

- a. Lack of education
- b. Both drinking and driving are almost second-nature to some
- c. A and B

4. About how many American lives are lost annually to drunk driving?

- a. 1,700
- b. 17,000
- c. 170,000

5. About how many Americans are injured every year by drunk driving?

- a. 3,000
- b. 30,000
- c. 300,000

6. The person most often killed in an alcohol-related crash is the

- a. drunk driver
- b. passenger
- c. sober driver

Chapter 1 Quiz

7. Which age group is most likely to drive drunk?

- a. teens, 16-20
- b. young adults, 21-34
- c. adults, 35+

8. For all people ages 6 through 27, what is the leading cause of death?

- a. alcohol-related crashes
- b. gun-related violence
- c. car accidents

9. The alcohol involvement in crashes increases during the night.

- True
- False

10. Peer pressure plays a key role in a teenager's decision to drink alcohol or use drugs.

- True
- False

Ninth Grade - Twelfth Grade

Competencies:

- 1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**

- 3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)**

- 6. Demonstrate the ability to use goal setting and decision making skills to enhance health. (PH, N, H, F, D)**

- 7. Demonstrate the ability to advocate personal, family, and community health. (C, PH, F, H, S)**

Integrated Instruction	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
P.E. Health	6 3b. 6a. 7 1f. 3a. 3b. 8 1f. 3b.	Teacher will discuss the consequences of using tobacco, alcohol, and other drugs. Upon completion of thorough discussion, students will participate in step aerobics activity found at: http://dave.esc4.net/lessons/search/detail.aspx?pageIndex=4&lessonId=438 Once completed, students will participate in "The Brain and Addiction" quiz.	Teacher Observation Graded by rubric. See appendix. Brain Quiz
Music Health Language Arts	6 3b. 7c. 7 1f. 3a. 3b. 8 1c. 1f. 3b.	Students will create an anti-drug song or poem that will strengthen their commitment to be drug free. Students will perform their skit for parents and other classmates.	Song/Poem

Ninth Grade - Twelfth Grade

Competencies:

5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)

6. Demonstrate the ability to use goal setting and decision making skills to enhance health. (N, PH, DA, F, M, H, S, D)

7. Demonstrate the ability to advocate for personal, family and community health. (C, CH, F, S, D)

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Language Arts: Listening, Speaking, Writing</p>	<p>5a. 5b. 5c. 5d. 6e. 6f. 7a.</p>	<p>Students will discuss decision making and the importance of making good choices. www.generationFREE.com</p> <p>Students will complete Easy - Difficult Worksheet that will analyze decisions made recently. Teacher will pinpoint when assistance necessary in making important decisions.</p> <p>Teacher will explain to the students "Six Steps in Making the Best Decisions". See attachment.</p> <p>Students will analyze how decisions are made daily in relationships, career choices, and sports. Upon completion of discussion, students will determine the difference between needs and wants.</p> <p>Enrichment/Acceleration: Students will complete Decision Scenarios to reinforce their understanding of making good decisions. See attachment.</p> <p>Remediation: Students will create a self-selected product depicting the "Six Steps in Making the Best Decisions."</p>	<p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Easy-Difficult Worksheet</p> <p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Decision Scenario Worksheet</p>

Ninth Grade - Twelfth Grade

Competencies:

2. Demonstrate the ability to obtain valid health information. (CH, PH, C)
3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (S, D, PH, N,M, DA)
4. Analyze the influence of culture, media, technology and other factors on health. (C, CH, PH)

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Language Arts: Reading, Writing, Viewing</p>	<p>2b. 3j. 4a.</p>	<p>Students will compile a list of healthcare professions. Teacher will write students responses on the board. Students will discuss the possibilities of these professions being career opportunities for them. Teacher will have guest speakers visit classroom to discuss different careers options.</p> <p>Students will evaluate the pros and cons of each profession by way of research. In researching the selection the selection, students will determine the primary goal of the profession and the amount of education required for the profession and personality qualities necessary for this profession.</p>	<p>Teacher Observation See Rubric for observation in appendix</p> <p>Teacher Observation</p>
		<p>Upon completion of all research, students will present the highlights of their findings through a self selected product.</p> <p>Enrichment/Acceleration: Students will select one career of interest. Students will job shadow a person currently working in the field of choice to determine whether the career is feasible in the future.</p>	<p>Presentation Graded by presentation rubric. See appendix</p>

		Remediation: Students will use the internet to research the top ten careers in healthcare. Students will identify the average salary, the amount of education and/or training required, and statistics on employee turnover within this field.	
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lesson plans.career912

Rubric for Report

Students incorporated a detailed account of the primary goals of this career in the report.	_____ /25 points
Students identified the personal qualities that are necessary for this career in the report.	_____ /25 points
Students included the education required for this career in the report.	_____ /25 points
Format (Intro, conclusion, etc.) /grammatically correct	_____ 25 points
Total Points	_____ /100 points

Ninth Grade - Twelfth Grade

Competencies:

1. **Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**

3. **Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)**

4. **Analyze the influence of culture, media, technology, and other factors on health. (C, CH, P)**

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p> <p>Language Arts: Reading, Writing, Listening, Speaking, Viewing</p> <p>Social Studies: Geography</p>	<p>1c. 1d. 3a. 3c. 3f. 3k. 4a.</p>	<p>Teacher will discuss factors contributing to the spread of infectious diseases. Students will determine reasons that some countries experience outbreaks of particular infectious diseases.</p>	<p>Teacher Observation Graded based on rubric, see appendix.</p>
	<p>4b.</p>	<p>Students will read and analyze key points of the article "Health Workers Race to Block Deadly Virus in Angolan Town" located online at http://nytimes.com/learning/teachers/featured_articles/20050412tuesday.html</p> <p>After reading and discussing article, teacher will quiz students on main points of article. See attachment.</p> <p>www.nytimes.com/learning/teachers/lessons/20050412tuesday.html</p>	<p>Quiz on Article</p>

		<p>Teacher will divide students into research groups. Students will investigate a country that has experienced an outbreak of an infectious disease.</p> <p>Students will write a report detailing the causes, effects and possible solutions of the outbreak. Students will present findings to the class.</p> <p>Enrichment/Acceleration: Students will interview an employee of the local health department to determine the most common infectious diseases in the local community. Students will present findings to the class</p> <p>Remediation: Students will use the school library to research the causes of infectious diseases. Students will also determine methods of preventing the spread of infectious diseases. Students will demonstrate (appropriate) preventive methods to the class.</p>	<p>Written Report and Class Presentation graded based on rubric. See appendix.</p>
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Ninth Grade - Twelfth Grade

Competencies:

5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M).

6. Demonstrate the ability to use goal setting and decision making skills to enhance health (Ph, N, H, F, D)

Integrated Instruction	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Language Arts: Speaking, Listening, Viewing</p> <p>Social Studies: Civics</p>	<p>5c. 5d. 6g.</p>	<p>Teacher will discuss relationships and problem solving with students. Students will brainstorm different means of problem solving. Students will define relationships and devise different problem solving strategies.</p> <p>Teacher will also state the importance of identifying who possesses the problem and who has the responsibility of resolving the problem. Students will determine how becoming involved in situations that do not concern them can lead to interference.</p> <p>Enrichment:</p> <p><a href="http://www.learning-for.life.org/lfl/programs/samples/7<sup>th</sup>.pdf">http://www.learning-for.life.org/lfl/programs/samples/7th.pdf</p> <p>Students will complete Problem Ownership Activity Sheet (See Attached) in order to distinguish who is responsible for the problem. In pairs, students will analyze what could have been done differently to solve each problem</p>	<p>Teacher Observation Graded based on rubric.</p> <p>Problem Ownership Activity Sheet</p>

		Remediation: In pairs, students will complete the Problem Interference work sheet. Students will describe real life situations and explain how and why interference can become part of the problem. Students will brainstorm ways to positively resolve difficult problems.	Problem Interference Work Sheet
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Name: _____

ACTIVITY 1

Problem Ownership

For each of the following problems, decide whether the problem is yours, the other person's, or external.

Mine Other's External

___ ___ ___ Your best friend says he or she is bored with school.

___ ___ ___ A friend has borrowed your favorite shirt and keeps forgetting to return it.

___ ___ ___ Scientists are predicting a major earthquake in California in the next 50 years.

___ ___ ___ A friend comes over to visit while you're trying to finish tomorrow's homework assignment.

___ ___ ___ You didn't understand today's math lesson, and there's going to be a quiz tomorrow.

___ ___ ___ Your friend's dog escapes his leash and runs away while you're walking him.

___ ___ ___ The air conditioner in your house doesn't work, and tomorrow's temperature is predicted to be higher than 100 degrees.

___ ___ ___ Your best friend has just been dumped by his/her girlfriend/boyfriend.

___ ___ ___ Your brother is always getting mad and throwing things when he doesn't get his way.

___ ___ ___ Your best friend accidentally broke his mother's favorite vase.

___ ___ ___ You forgot to water the neighbor's plants while he was out of town, even though you'd agreed to do so.

Name: _____

ACTIVITY 2

Problem Interference

List three real-life problems: one should be yours, one should be someone else's, and one should be an external problem. Describe how individuals who didn't "own" the problem became involved, or "interfered," and what the result was. If you can't think of real-life situations, you may create examples.

My problem: _____

Interference: _____

Other's problem: _____

Interference: _____

External problem: _____

Interference: _____

Ninth Grade - Twelfth Grade

Competencies:

1. **Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**
3. **Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)**
5. **Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)**
6. **Demonstrate the ability to use goal setting and decision making skills to enhance health (Ph, N, H, F, D)**
7. **Demonstrate the ability to advocate for personal, family, and community health. (C, CH, F, S, D)**

Integrated Instruction	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
Health Science: Life Language Arts: Viewing, Listening, Reading, Writing	1c. 1d. 3k. 5a. 5d. 6e. 7c.	<p>Teacher will begin class with a discussion of HIV and other STD's. Teacher will reinforce how quickly the disease(s) can spread via a game.</p> <p>http://www.advocatesforyouth.org/lessonplans/hivtransmission.htm</p> <p>See attachment for game.</p> <p>Students will research infectious diseases. Students will use information learned from game to prepare a report on the spread of communicable diseases.</p> <p>Enrichment/Acceleration: In small groups, students will create an interactive demo showing how quickly HIV can spread.</p> <p>Remediation: Students will create a poster demonstrating the transmission of HIV from a small group to an epidemic.</p>	<p>Participation rubric. See appendix.</p> <p>Report graded based on rubric. See appendix.</p>

Ninth Grade - Twelfth Grade

Competencies:

1. Comprehend concepts related to health promotion and disease prevention. (C, PH, CH, H)

5. Demonstrate the ability to use interpersonal communication skills to enhance health. (M, PH, D, S, D)

6. Demonstrate the ability to use goal setting and decision making skills to enhance health (Ph, N, H, F, D)

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p>	<p>1c.</p> <p>5a.</p> <p>6f.</p>	<p>Students will brainstorm reasons that young adults engage in unprotected sex (fear of talking about it with partner, poor planning, and use of drugs or alcohol).</p> <p>Teachers will inform students of statistics that prove that young adults are at a greater risk for developing STD's. http://school.discovery.com/lessonplans/programs/deadlyDesires/</p> <p>Students will create a brochure warning students about the dangers of engaging in unprotected sex. www.cdc.org</p> <p>Enrichment/Acceleration: Students will contact the local health department to determine the most common STDS in the local area.</p> <p>Remediation: Students will choose one STD to research. Students will identify methods of transmission, preventative measures, and whether the disease or infection is curable. Students will present the information using technology, such as Power Point.</p>	<p>Teacher Observation</p> <p>Brochure-- Rubric will be used for grading; see</p>

Ninth Grade - Twelfth Grade

Competencies:

- 1. Comprehend concepts related to health promotion and disease prevention. (M, PH, D)**
- 3. Demonstrate the ability to practice health enhancing behaviors and reduce health risks. (CH, PH, F, D)**
- 5. Demonstrate the ability to use interpersonal communication skills to enhance health. (F, H, M)**

Integrated Instruction (with strands)	Grade/Competency /Objective	Suggested Teaching Strategies	Suggested Assessment Methods
<p>Health</p> <p>Science: Life</p> <p>Language Arts: Speaking, Listening, Writing</p>	<p>1a. 3b. 5b. 5c.</p>	<p>Teacher will briefly discuss with students the meaning of stress and the impact it can have on the body.</p> <p>Students will brainstorm the causes of stress and identify positive ways in which they can handle stress.</p> <p>Teacher will write students' positive responses to handling stress on the board, while emphasizing the powerful feelings that stress can cause if managed inappropriately.</p> <p>Enrichment/Acceleration: In groups four to six, students will participate in a "Gallery Walk" See attachment. http://www.educationworld.com/atsl/archives/02-1/lesson045.shtml</p> <p>Remediation: Students will research ways of managing stress and write a report detailing which stress management techniques (exercise, journaling) they feel would work best for them and why.</p>	<p>Teacher Observation Graded based on rubric. See appendix.</p> <p>Written product rubric. See appendix.</p>