

Lesson/Unit Title	The “McEconomics” of a Healthy Lifestyle
Day(s)	6 days
Grade Levels	7th Health/Physical Education Consumer Education
Curriculum Areas	Health/Family Consumer Science
Website(s)	<p>http://nelinks.nde.state.ne.us/ReportViewer.aspx?Report=Report1to1.rpt&Sel=13 13 Nebraska standards for family and consumer science</p> <p>www.nutristrategy.com/activitylist.htm Calories/Exercise website</p> <p>http://nhlbisupport.com/chd1/FoodLabel/foodlabel.htm Interactive website for reading/interpreting food labels</p> <p>www.keepkidshealthy.com/nutrition/ Nutritional facts</p> <p style="text-align: center;">McDonalds websites</p> <p>www.mcdonalds.com/ http://app.mcdonalds.com/bagamcmeal www.mcdonalds.com/usa/eat/nutrition_info.html McDonalds’ websites focus on products, McMenus for different countries, new focus on balanced living and nutrition, nutritional facts about meals, etc. Check it out! Students will enjoy this site, especially the “Bag a Meal” interactive nutritional exercise.</p> <p style="text-align: center;">Smart Living websites</p> <p>www.smartspot.com/7_tool_spot/7-7-5_food_label.php Interactive website teaches students how to read food labels www.smartspot.com/7_tool_spot/7-3-1_food_pyramid.php New redesigned FDA “food pyramid” www.smartspot.com/7_tool_spot/7-1-1_bmi_calculator.php Body Mass Calculator www.smartspot.com/11_playground/11-2_certificate.pdf Smart Living certificate for completing nutrition program</p>
Teacher Resources	<ul style="list-style-type: none"> • Video: “<i>Balancing Act (Smart Eating): Kids at Kerrisdale</i>,” 1998©. Available from most ESUs. • Powerpoint: “<i>The McEconomics of Healthy Eating</i>” • Computer Lab with Excel program • (optional) Calculator to perform mathematical applications • Pedometers, walking shoes • Food, measuring cups, bowl, bottle of juice or soda
Unit Overview	<p>In this unit, students will become familiar with their nutrition and exercise habits. Students will:</p> <ul style="list-style-type: none"> • Identify how much TV they watch in a day; • Monitor their dietary habits and evaluate their choices; • Measure the amount of activity they do and record the steps in a day by using a pedometer;

	<ul style="list-style-type: none"> • Create healthy snacks for after school; and • Create nutritious menus and plan activities for exercise. <p>Daily Lesson Overview: Day 1: Movie “Balancing Act (Smart Eating)” Day 2: A serving size/nutritious facts Day 3: Burning calories Day 4: Healthy snacks Day 5: Planning the menu Day 6: On the move – exercise</p>
Nebraska Frameworks Essential Learnings	<p>Family and Consumer Science Students will identify and monitor eating and exercise habits while learning to incorporate a healthy lifestyle into their daily routine. They will evaluate nutritional facts of different foods and caloric effect of different forms of exercise. Students will plan menus and activities that can easily be fitted into their busy lifestyle.</p> <p>Example Indicators <i>Personal indicators</i>--Students will monitor their habits and then evaluate those habits before creating a plan for a healthier lifestyle.</p>
Link to Nebraska Standards	<p>Family and Consumer Science</p> <ul style="list-style-type: none"> • Demonstrate nutrition and wellness practices that enhance individual and family well being (12.7.1) <p>Mathematics</p> <ul style="list-style-type: none"> • Students will justify solutions to mathematical problems (12.2.2) • Students will perform estimations and computations of real numbers mentally, with paper and pencil, and with technology (12.2.3)
NBEA Curriculum Standards	N/A
National Economics Standards	Standard 2: Marginal costs/Marginal benefits
National Personal Finance Standards	N/A
Teaching Strategies, Procedures and Activities	<p>(Prior to unit – find as many pedometers as possible. I usually like to have enough for at least one-fourth of the class.</p> <p>Day 1 Students will be introduced to nutrition and start to evaluate their eating/exercise habits. (Two days prior – ask students to record every item they eat, exercise and TV hours chart attached) Step 1: Briefly discuss what they ate Step 2: Watch “Balancing Act (Eating Smart)” video Step 3: Assignment 1 – Using Excel or Word, create a chart to record eating habits (“My Daily Health Chart” sample attached). Assign pedometers and explain how they work.</p>

	<p>Day 2 Students will identify nutritional facts (caloric, fat, sodium, carbohydrate, and fiber content) of the food they ate the previous day <i>Step 1:</i> How much is a serving? <i>Step 2:</i> Use internet to fill out Excel chart for the nutrition facts for yesterday’s food consumption. Figure totals. Calculate recommended daily amounts of calories, fat, sodium, carbohydrates, and fiber <i>Step 3:</i> Record pedometer steps of students <i>Step 4:</i> For tomorrow—Bring or wear walking shoes!</p> <p>Day 3 Students will calculate caloric use for different exercises <i>Step 1:</i> One-mile walk (Have pedometer kids clear their pedometers so steps in mile can be recorded) <i>Step 2:</i> Discuss the walk and the exercise the steps taken during day. <i>Step 3:</i> Use internet and list caloric use for five favorite exercises and the ones on student’s lists</p> <p>Day 4 Students will create recipes for healthy snacks <i>Step 1:</i> What’s in a HoHo? <i>Step 2:</i> Students will work in pairs or groups and use internet to create two healthy, nutritional after-school snacks. <i>Step 3:</i> Assignment 2 – As a group, plan on preparing the healthy snack for tomorrow’s bell ringer (Trade pedometers if necessary)</p> <p>Day 5 Students will demonstrate their knowledge of a balanced meal plan for a specific day <i>Step 1:</i> Explain, discuss, and eat the students snacks <i>Step 2:</i> Discuss the benefits of a one mile/15-minute daily walk <i>Step 3:</i> In pairs or groups, students will create two – one day meal plans that list nutrition facts. <i>Step 4:</i> For tomorrow--Bring or wear walking shoes</p> <p>Day 6 Outcome: The students will realize the caloric value of exercise and negative effects of a couch potato lifestyle <i>Step 1:</i> Discuss the pedometer and steps taken <i>Step 2:</i> Discuss how an unhealthy lifestyle affects us in the long term, and the effects it has on our society <i>Step 3:</i> Each student will create a weekly TV and exercise schedule (Assignment 3 sample attached)</p>
<p>Math Applications</p>	<p>Nutritional Values on Food Labels. Students will use website and accompanying Food Labels worksheet (attached) to discuss, compare and calculate serving size of food products: http://nhlbisupport.com/chd1/FoodLabel/foodlabel.htm</p> <p>In addition, students will also . . .</p> <ul style="list-style-type: none"> • calculate nutritional values of different serving sizes using the serving size listed on the food label

	<ul style="list-style-type: none"> calculate daily requirements by totaling intake amounts and using percentages to figure how much of their daily requirement is being met by the intake of individual foods
<p>Assignments</p>	<p>Prior to doing unit—Borrow Pedometers! If the school does not have access to pedometers, try to find enough so at least one-fourth of the class can wear them at a time. If the school does not have them, ask parents, hospital, Enlighten Nebraska, or local health clubs if they can be borrowed.</p> <p>Assignment 1: Record of Dietary/Wellness habits Using Excel, create a chart that will allow you to list the food you consume, the exercise you undertake, hours of TV you view daily, and record the number of steps you take in a day. (These steps should NOT include steps taken during planned exercise – if I decide to go job two miles, I would take off the pedometer). You must include columns for calories, fat, sodium, carbohydrate, and fiber. List pedometer steps on this chart. Have a “totals” row at the bottom so we can evaluate daily.</p> <p>How much is a serving? Bring measuring cups and various forms of food and drinks to school to show students how much ½ cup of cereal is and then pour into a cereal bowl so they see how empty the bowl really looks. Bring a bag of little carrots and show where it states serving size so students realize how many carrots make a serving. Have a bottle of juice or pop to illustrate that the nutrition facts are for a serving and the bottle has more than one serving. Demonstrate that 3-oz of meat is the size of deck of cards! Discuss food safety/food handling – washing hands and food containers</p> <p>What’s in a Ho-ho? Bring a package of Ho-ho’s to school. (Can be any food item that is a favorite after school snack) Look at nutrition facts and discuss as relationship between facts and daily requirements. Have apple slices wrapped in slivered turkey for students to try (Any version of a healthy snack will work) Discuss nutritional facts and relationship between facts and daily requirements.</p> <p>Assignment 2: Each group needs to bring twice as many snacks as there are group members so each student may sample two different snacks. (3 group members – make 6 snacks)</p> <p>Assignment 3: Weekly Exercise and TV Schedule Students log/record their exercise and tv-watching habits.</p>

Used with permission. Pope John XXIII High School, Elgin, Nebraska.

Assessment	Students will be assessed in the following areas:	
	Lesson/Unit Evaluation Criteria	Points
	Menu plans	0 – 50
	Snacks preparation	0 – 30
	Daily Participation, Assignments	0 – 20
	Unit Possible Points	100
Grading Scale: A = 90-100 B = 80- 89 C = 70- 79 D = 60- 69 F = 0- 59		
Instructor comments: True understanding of nutrition and wellness is life changing. Students are assessed on participation so I know they experienced the steps to a healthy lifestyle.		
Teacher	Mary Bartak	
School	Elgin Pope John XXIII High School	

Food Labels Worksheet

Using either a smart board or a projector, place the following website on the board for the students to see:

<http://nhlbisupport.com/chd1/FoodLabel/foodlabel.htm>

Work through the questions and some of the different options on the web site. Then allow the students to either work alone or in small groups to explore the site. They can insert their personal information and learn how many calories, grams of cholesterol, or grams of sodium is recommended for their body.

NOTE: *This is an interactive website that students will enjoy!*

<http://nhlbisupport.com/chd1/FoodLabel/foodlabel.htm>

How many servings are in a 20-oz. glass of milk?

Answer: 2 ½ servings

How many calories would be in that same glass of milk?

Answer: 200 calories

If I drank the whole glass, have I met my daily calcium requirement?

Answer: No, just 75% of recommended calcium intake

What percent of my daily vitamin D requirement have I met if I drink the whole glass?

Answer: 62.5% of RDA for Vitamin D

This glass of milk would contain how many grams of protein?

Answer: 20 grams of protein

Amount Per Serving	
Calories 80	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol less than 5mg	1%
Sodium 130mg	5%
Total Carbohydrate 12g	4%
Dietary Fiber 0g	0%
Sugars 11g	
Protein 8g	
Vitamin A 8%	Vitamin C 4%
Calcium 30%	Iron 0%
	Vitamin D 25%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 85g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Dietary Fiber 0g	0%
Sugars 11g	
Protein 8g	
Vitamin A 8%	Vitamin C 4%
Calcium 30%	Iron 0%
	Vitamin D 25%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 85g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

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Assignment 1							
My Daily Health Chart (sample)							
Date							
Food/Exercise		Calories	Fat	Sodium	Carbs	Fiber	
Breakfast							
Wheat toast		70	1	135	13	2	
1Tbsp honey		60	0	0	17	0	
coffee		0	0	0	0	0	
Lunch							
Yogurt							
Subway turkey wrap		270	6	110	13	4	
Apple		80	0	0	17	4	
Dinner							
Snacks							
Daily exercise							
Morning jog	20 min.	-164					
Daily steps	4216	-150					
All exercises are listed as negatives so they are subtracted from calories							
Daily Totals		166				10	
TV hours viewed	3hours						

Assignment 2 Healthy Snacks Menus

After School Snack Menus Rubric

	Excellent	Satisfactory	Needs Improvement
Peer Review /15	7-10 Majority of students liked.	3-6 Some students liked.	0-2 Few students liked.
Nutritious /15	11-15 Low calorie, high fiber, low fat, low sodium.	5-10 Snack is mostly low calorie, high fiber, low fat, low sodium.	0-4 Snack is not low in calories, high fiber, low fat or low sodium.
Total Points /30			Grade Received Comments

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Assignment 3 Weekly Exercise and TV Schedule

Weekly plan for exercise and TV time			* if done		* if met	
						** if exceeded
Sun.	walk 4 miles	early morning	*	TV	TV - 2 hrs	*
Mon.	tread mill 30 min	prior school	*			
Tue.	lift weights	after school			TV - 2 1/2 hrs	*
Wed.	tread mill 30 min	prior school	*		TV - 1/2 hr	**
Thu.	lift weights	after school	*		TV - 1 hr	*
Fri.	swim at health club	evening	*			
Sat.					TV - 1 hr	**
						7 actual hours
Sun.						
Mon.						
Tue.						
Wed.						
Thu.						
Fri.						
Sat.						