## 4-H Healthy Lifestyles/ Food and Nutrition Education for Children

## Submitter's Contact I nformation

V. Renee Dotson

Gilmer County Extension Coordinator and Family and Consumer
Sciences Agent with University of Georgia Cooperative Extension
1123 Progress Road, Suite A, Ellijay, GA 30540
Email: rdotson@uga.edu
706-635-4426 (phone)
706-636-4426 (fax)
Machelle Gill
Gilmer County 4-H Program Assistant
1123 Progress Road, Suite A, Ellijay, GA 30540
E-mail: magill@uga.edu
706-635-4426 (phone)
706-636-4426 (fax)

## Program of Distinction Category

- Food and Nutrition
- Nutrition Education
- Health and Fitness
- Youth Decision Making


## Sources of Funding that Support this Program

- Grant from Gold Kist Inc. in the amount of \$2,000.


## Program Content

## Knowledge and Research Base

Obesity is an epidemic. Sixty-one percent of Georgia's population is obese. The Centers for Disease Control and Prevention states one in every four children in the United States is classified as either overweight or at risk for being overweight. High blood pressure, elevated cholesterol and bone and joint problems are more prevalent in children over the past 30 years. Obesity increases the risk of type 2 diabetes, hypertension, heart disease, colon cancer and obstructive sleep apnea. Overweight children are suffering from what was once thought of as only adult problems (Dowshen, 2004).

Overweight children are often the last to be chosen as playmates, even as early as preschool. Overweight children are more likely than normal weight children to develop unhealthy dieting practices and eating disorders. This group may also be more prone to depression and substance abuse. (Dowshen, 2004).

Many factors are associated with obesity and overweight in children, such as larger portion size, eating out often, increased consumption of sugar sweetened drinks, increased screen time and lack of activity. Overweight is
a result of an imbalance between calories in and calories out, or the activity level.

## Needs Assessment

According to the " 2006 Georgia Data Summary: Obesity in Children and Youth," obesity in children and youth is a significant public health problem in Georgia. Twenty-eight thousand (24\%) of third-grade children and 59,000 ( $16 \%$ ) of middle school students are obese. Only 71 percent of middle school students are vigorously active, and one-half of Georgia's middle school students watch 3 or more hours of television on school days.

Overweight and obesity comes with a cost. 9,780 (15\%) deaths in Georgia in 2002 were attributed to overweight and obesity. The annual cost of obesity in Georgia is estimated at $\$ 2.1$ billion, $\$ 250$ per Georgian each year. The length of stay in the hospital for the obese person is 85 percent longer than for a normal weight person.

In the past 8 months, the Gilmer County Family and Consumer Sciences Agent has counseled 2 different sets of parents on ways to reduce the weight of their child in order for the child to have surgery. The doctor suggested the parents learn how to reduce the calorie level their child is eating while increasing the activity level.

Due to the information related to the health issues in Georgia, the information from The Centers of Disease Control and Prevention on childhood obesity, and discussion with 15 teachers the 4-H Healthy Lifestyles/Food and Nutrition Education curriculum was implemented.

The fifth-grade teachers then decided to encourage the students to write in their food journals during language arts and to use their pedometers everyday to measure their steps. They encouraged the students to walk during recess or reward time. It was decided that they would encourage the students to bring healthy snack options to eat during snack time.

## Program Goals and Objectives

The program has four specific goals: provide information on how to use The Food Guide Pyramid to make healthy eating choices, set goals for increasing physical activity, understand the importance of breakfast and snack choices to a healthy diet, and understand the need for calcium in the diet for all ages.

Students will score higher on the posttest than on the pretest and gain knowledge on all subjects discussed. When sixth-grade students are asked to recall information related to what they learned in fifth grade, they will produce measurable knowledge on Healthy Lifestyles.

## Target Audience

The target audience for this program is all fifth and sixth-grade $4-\mathrm{H}$ club members. Gilmer County has a population of 25,000.

## Type of Program

Organized 4-H Club meeting - All 4-H club meetings are led by either the Gilmer County 4-H Program Assistant or Gilmer County Family and Consumer Sciences Agent. The club meeting is conducted during school time in the classroom. Students are not eligible to participate in $4-\mathrm{H}$ club meetings prior to the fifth grade in Gilmer County. This program meets the following academic curriculum standards for fifth grade: Health- Nutrition 20, 22, 23/ Lifestyle- 15/ Growth \& Development- 7/ Science-22/ P.E. - 1, 4, 5. Fifteen fifth-grade classes meet each month. Each club time is approximately 50 minutes, and approximately 30 minutes is devoted to teaching the Healthy Lifestyles program.

## Delivery Methods

The Healthy Lifestyle Program consists of various components: The components include activities related to a healthy lifestyle, lecture by the 4-H leader, and sampling of healthy foods. The program was taught during the monthly in-school 4-H club meeting. Fifteen fifth-grade classes meet each month for $4-\mathrm{H}$. Five different healthy lifestyle topics were taught. Each month a new healthy lifestyle topic was discussed. A total of 75 classes were taught about healthy lifestyles, reaching approximately 375 fifth-grade students. (See Exhibit 1 for examples of activities.)

## Curricula and Educational Materials

The Healthy Lifestyles curriculum was taught by Renee Dotson, University of Georgia/Gilmer County Family and Consumer Sciences Agent, and Machelle Gill, Gilmer County 4-H Program Assistant. Instructors had prior training in healthy lifestyles, Childhood Obesity, the new Food Guide Pyramid, and other nutrition and health related trainings. Educational material was used from various reputable sources, websites, and books. Curriculum was then developed by Machelle Gill to meet the goals and objectives of the program. (See Exhibit 2 for curriculum developed and presented to teachers monthly.)

Listed below are the resources used.

- Georgia 4-H Eat Well Friends magazine
- www.acefitness.org (Operation Fit Kids)
- www.justmove.org
- United States Department of Agriculture, Food and Nutrition Service
- www.Mypyramid.gov
- Materials developed by Carol A. Rice, Ph.D., R.N., Professor and Health Specialist, Texas Cooperative Extension, The Texas A\&M University System, College Station, Texas, 2004.


## Teamwork and Collaboration

Collaboration starts with the Gilmer County Board of Education and the Gilmer County school system. 4-H club meetings are held each year during school time. Teachers welcome 4-H programs and agents/program assistants into their classroom. The teachers help promote the Healthy Lifestyles Curriculum by encouraging the students to wear their pedometers and to write in their journals. The pedometers and food/activity journal were purchased through a grant from Gold Kist Inc. in the amount of \$2,000.

## Program Evaluation

The presenters designed a pre- and posttest to test the student's knowledge before the program and after the program. The pretest consisted of 15 true/false questions, and it was given to the students before starting the program. The posttest consisted of the same 15 true/false questions that appeared on the pretest, as well as 6 knowledge gained questions. Each student completing the program was given a posttest. (See Exhibit 3.)

## Methods

The evaluation was conducted in two parts. A pretest was given to each 4-H member on the first day of the program and a posttest was given to each 4-H'er on the last day. The pretest shows the knowledge before the program and the posttest shows knowledge gained and possible changes the students will/has made as a result of the program. Evaluation of the $4-\mathrm{H}$ Healthy Lifestyles Program includes the following:

1. Comparison of the participant's knowledge before and after the program.
2. Potential practice changes for participants.
3. Participants practices as a result of the program.
4. What participants learned from the program. (See page 37-39 of this document for the results of the evaluation.)

## Process Evaluation

Teachers and 4-H members provided feedback regarding the effectiveness of the program and possible changes for the next year. Teachers were very supportive of the program and wanted it to be repeated each year with the fifth-grade $4-\mathrm{H}$ members. Students suggested more hands-on activities such as food pyramid relay, where each group would go outside, be given a picture of a food and then run to put it in the correct food group. A suggestion from a teacher: The information is great but show the children how to incorporate what they have learned into making healthy choices every day.

## Outcome Evaluation

Each fifth-grade 4-H member received a health journal and pedometer. More than 350 were distributed. A pre- and posttest were given to each $4-\mathrm{H}$ member. A total of $2434-\mathrm{H}$ members participated in both the pre and posttest. Eighty-nine percent of the participants improved their knowledge. Seventy-seven percent of the participants indicated they were
more likely to drink water. Seventy-six percent indicated they are more likely to eat a healthy breakfast daily. Fifty-five percent indicated they are more likely to choose the regular size foods at fast food restaurants instead of the deluxe or super sizes. Forty-five percent indicated they are more likely to drink less sugary drinks like sweet tea and soda.

## What participants learned from the program:

- How to eat healthy. (54 participants mentioned this)
- Get more exercise/stay healthy. (57 other individuals mentioned this)
- Not to eat too much sugar. (5 people stated this)
- How important it is to eat breakfast. (21 individuals mentioned this)
- I learned there are about 2,000 steps in a mile. ( 2 mentioned)
- Don't eat a lot of junk food. (5 mentioned)
- Drink more water. (16 mentioned)
- I learned about calcium and how it helps you. (6 mentioned)
- To eat fruits and veggies. ( 2 mentioned)
- You need a certain amount of calories. ( 2 mentioned)
- You should stay in shape all your life.
- Soft drinks are unhealthy. (6 made this comment)
- About serving size. (13 mentioned)
- That extra calories are stored as fat.
- You should eat more fruits than fruit juice. (6 mentioned)
- How to lose weight and stay healthy. (14 mentioned)
- How to balance meals.

Suggestion given by fifth grader: I think you should take the kids outside and set up categories of fat food and healthy food and see what they choose and do this at the end and see what they have learned.
(See Exhibit 4: *4-H Healthy Lifestyles Eat Well Evaluation Summary.)

## Communication to Stakeholders

A letter explaining the evaluation results was sent to the Board of Education, the Board of Commissioners, and Gold Kist, Inc. Next year when the program is repeated a web-site will be set up that will provide family members with activities and resources related to the Healthy Lifestyles curriculum.

## Evidence of Sustainability

The program was well received by students and teachers. This program will be repeated every other year to the fifth-grade students in Gilmer County.

## Replicability

The Healthy Lifestyles curriculum has the probability of being replicated. Information was provided to the University of Georgia State Specialist, Kelly Cordray, on the topics discussed at each club meeting. A copy of the pre and posttest, and a copy of the evaluation summary were mailed to Kelly Cordray for possible use by other counties in Georgia. Other 4- H agents have used the pre and posttest with their 4 -H'ers.

## Rationale and Importance of Program

The responsibility of a child's health should be that of the parent, but with many children not living with their parents, and many parents or guardians not having the knowledge of "what is healthy," this could be the only opportunity the student has to learn this important information. The response from the children was that of knowledge gained and a greater understanding of what it means to be healthy.

## References

Dowshen, S. (2004, January 14). KidsPoll: Students weigh in about obesity. Retrieved August 21, 2007, from the Nemours Foundation's Center for Children's Health Media, KidsHealth for parents Web site: http://www.kidshealth.org/PageManager.jsp?cat id=5\&article_set=34 119\&lic=6.

Georgia Department of Human Resources, Division of Public Health. (2006). 2006 Georgia data summary: obesity in children and youth (Publication No. DPH06.138HW). Atlanta, GA: Author.

Georgia Department of Human Resources, Division of Public Health. (2004). Georgia overweight and obesity fact sheet (Publication No. DPH04/301HW). Atlanta, GA: Author.

National Center for Health Statistics. (2006). Obesity still a major problem. Hyattsville, MD: U.S. Department of Health and Human Services.

## Exhibit 1

Methods used to deliver the program.

Friends Eat Well, 4-H Healthy Lifestyles<br>Walking in the Park Activity Log My Healthy Lifestyles Journal Page<br>Step Activity Log<br>Breakfast on the go!

Exhibit 2
Curriculum developed and presented to teachers monthly.

Introduction to Healthy Lifestyles<br>Let's Get Moving!<br>Wake-up Your Bodies!<br>Chill Out/Breakfast...Don't Skip It<br>Pump Up the Calcium!

Exhibit 3<br>Program Evaluation

Eat Well 4-H Healthy Lifestyles Pre and Post Test

Exhibit 4<br>4-H Healthy Lifestyles Eat Well Evaluation Summary

## Serving Size Scramble

Match each household item in the left column with the serving of iood it represents in the right column.


1 cup
pasta, rice, fruit or vegetables (2 servings)

1 teaspoon butter or margarine

1 pancake or waffle

1 medium potato or $1 / 2$ cup fresh fruit or vegetable

3 ounces meat or chicken
$11 / 2$ ounces cheese
$1 / 4$ cup raisins or other dried fruit

# Fruits and Vegetables - <br> Add Color To Your Life! 



It's hard to go wrong with fruit and vegetables. You can eat them whole, chopped, raw or cooked, dry, frozen, fresh or canned. Eating a variety of colorful fruits and vegetables each day provides your body with energy, fiber, vitamin C, and other nutrients that you need to stay healthy and fight off diseases.

## Aim for at least 5 FRUITS and VEGETABLES a day!



Put a $\checkmark$ by the fruit and vegetable ideas that you already do. Put a $\star$ by the ideas that you plan to start doing to help you get your 5 a day:
$\qquad$ Peel and eat a banana as a snack.
Eat applesauce (sprinkle cinnamon on top).
Drink 6 oz ( $3 / 4$ cup) of $100 \%$ fruit juice.
Eat a side salad topped with tomatoes, carrots, and other colorful vegetables.
Cut or peel an orange as a snack.
Choose vegetables as a side dish more often than French fries in the cafeteria.
Top grilled chicken sandwiches or hamburgers with lettuce and tomatoes.
Order a pizza with lots of colorful vegetable toppings.
Try a new fruit or vegetable side dish at school or restaurant.
Dip baby carrots, broccoli, sliced cucumbers, or celery in ranch dressing. Choose a baked sweet potato as a side dish instead of a regular baked potato. Ask for at least 2 vegetable toppings on your deli sandwich.

## Make A Fruit Smoothie!

TAKE OUT: blender, measuring cup, 2 glasses or paper cups, 2 straws (optional)

## STEP 1)

- Fill blender with 1 cup $100 \%$ orange juice (or other $100 \%$ fruit juice)
- Add $1 / 2$ cup vanilla yogurt (or any flavor)
- Blend on high until smooth


## STEP 2)

Choose one or more fruits below to add to the blender: Be sure to wash fresh fruits before adding to the smootbie!

- $1 / 2$ banana
- $1 / 2$ cup strawberries (fresh or frozen)
- $1 / 2$ cup pineapple (canned or fresh)
- $1 / 2$ cup blueberries (fresh or frozen)
- $1 / 2$ cup peach slices (canned, frozen or fresh)


## STEP 3)

Add 3-4 ice cubes. Cover and blend on high until smooth.


## STEP 4)

Pour into glasses (or paper cups) and enjoy!
Makes 2-3 servings. Refrigerate any leftover smoothie.

## Stalt ！lour Engines！



A nutritious breakfast includes energy and a variety of nutrients to help our body perform． Breakfast is important for energy，growth，and mental alertness．


Kids cannot learn and work without fuel for their body and brain．Where do we get fuel？Fuel，or energy，comes from the foods we eat．Carbohydrates are the main source of energy for the body．

Breakfast is especially important because as the word suggests，we must break our＇fast＇．What does that mean？When you go to sleep your body is not taking in food，so it is in a period of fasting，or being without food．This means that there is no energy source available for you to use when you wake up and become more active．In order to feel and do your best，you need to ＂break the fast＂and eat a healthy breakfast！

## PロWER பP WITH THESE FロロDS：

Breakfast doesn＇t have to be boring．You can include many different foods．
Your goal is to include foods from at least 3 of the food groups．
Start with these 3 groups：
－Grain：this could include cold or hot cereal，toast，a bagel，or muffin．
－Dairy：items can include milk，cheese，or yogurt．
－Fruit：any of your favorites－try fresh，frozen，canned，or dried．If you don’t like fruit，try a vegetable instead．

Sample

| Grain <br> Wheat crackers |
| :---: |
|  |
|  |


$+$| Dairy <br> Cheddar cheese cubes |
| :---: |
|  |



Power pinctict Breakfast！

## Power Panther Word Jumble

Unscramble the letters to come up with a breakfast food. Use each space for only one letter.


Power Panthermsays...
Eat Smart, Play Hard. ${ }^{m}$

Solve the jumble phrase by using the letters in the circles above to fill in the circles below and make a word. Hint: A great way to start your day!


## Be Active Every Day!

Being active is healthy and fun. It makes you feel good and gives you lots of energy. It's also a great way to hang out with your friends.

Some types of activities require you to be more active than others, like running and jumping. These activities use the large muscles in your arms and legs. Do things that make you active for at least 1 hour every day. You can do small amounts of exercise for 15 minutes at a time until your activities add up to a total of 60 or more minutes each day.

## It's easy to be more active!

Check all the things below that would help make you more active.

R Ride your bike
Walk to school
$\square$ Play at recess

- Skateboard
- Play basketball
- Practice karate
$\square$ Play hopscotch S Swim
- Play tennis
$\square$ Play at the park

- Jump rope
$\square$ Play soccer
$\square$ Walk your dog
- Play Frisbee
- Play softball or baseball
$\square$ Vacuum or sweep
$\square$ Do yoga or pilates
Go on a nature hike

Write some activities below that you plan to do to reach your goal of being active for a total of $\mathbf{6 0}$ minutes each dily.

## ActiIIVITY

## .MINUTES

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$

## C'alorie C'alculator ior Various Activities

This is a general guide to caloric expenditure based on performing an activity for 30 minutes. Keep in mind that this chart is just a guide. Many factors, including weight and intensity level, influence the actual amount of energy used. The calories used in this chart are based on a 100 -pound person.

| Activity | Calories used in <br> 30 minutes |
| :--- | :---: |
| Jumping Rope | 240 calories burned |
| Flag Football | 192 calories burned |
| Basketball | 192 calories burned |
| Bicycling, 12-13.9 mph | 192 calories burned |
| Jogging, 5 mph | 192 calories burned |
| Soccer | 168 calories burned |
| Tennis | 168 calories burned |
| Swimming | 144 calories burned |
| Aerobics, Low Impact | 132 calories burned |
| Dancing | 132 calories burned |
| Mowing Lawn | 108 calories burned |
| Walking, 4 mph | 108 calories burned |
| Tai Chi/ Yoga | 96 calories burned |
| Weight Lifting | 72 calories burned |
| Sitting | 27 calories burned |
| Watching TV | 18 calories burned |

- What activity could you do to burn the 150 calories in a small bag of chips?
- If a snack size candy bar has 100 calories, could you burn off those calories by doing the following activities for 30 minutes?

| Dancing | YES | NO |
| :--- | :--- | :--- |
| Watching TV | YES | NO |
| Walking | YES | NO |

Information taken from Fitness Partner Connection Jumpsite! Accessed 06/08/2004. http://www.primusweb.com/cgi-bin/fpc/actcalc.pl

## C'alcium

## Growing teens need 1300 mg of Calcium each day. These foods items provide a good source of Calcium.



1. Pick the foods you ate yesterday and list how much Calcium is in each food.
2. Add the values to see if you met your daily goal.

3. If you didn't get enough Calcium, What foods can you add to help you get more? You can eat more than one serving of any food.

## Friends: Healthy Lifestyles

NAME: $\qquad$ TEACHER: $\qquad$
Answer the following questions using choices from the word bank below. Carefully tear out this page and return it to your teacher.

1. Teenagers should aim to get $\qquad$ milligrams of calcium each day.
2. You should strive to include $\qquad$ different food groups in your breakfast.

Plan a breakfast that meets these guidelines:
3. Teens should spend $\qquad$ minutes doing physical activity each day.

Are you meeting this goal? YES NO
If not, do you plan to increase your physical activity? YES NO
If so, what will you do?
4. Teens should eat at least $\qquad$ servings of fruits and vegetables every day.
5. A 12 oz. glass of fruit juice counts as $\qquad$ serving(s) from the fruit group.

| WORD BANK |  |  |
| :--- | :--- | :--- |
| 3 | 1300 | 1000 |
| 2 | 60 | 5 |
| 30 | 20 | 800 |
| 1 | 4 | 6 |

## My Healthy lifestyles Journal

| Breakfast | Lunch | Dinner | Snacks |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Did you move and groove today? $\qquad$

| What moves did you make? | For how long? |
| :--- | :--- |
|  |  |
|  |  |

## Weekly Goals

This week I pledge to eat $\qquad$
$\qquad$ times to improve my nutrition.

I pledge to $\qquad$ for $\qquad$ minutes $\qquad$ days this week to be physically active.

## My Healthy Lifestyles Journal

| Breakfast | Lunch | Dinner | Snacks |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Did you move and groove today? $\qquad$

| What moves did you make? | For how long? |
| :--- | :--- |
|  |  |
|  |  |

## Weekly Goals

This week I pledge to eat $\qquad$
$\qquad$ times to improve my nutrition.

I pledge to $\qquad$ for $\qquad$ minutes $\qquad$ days this week to be physically active.

## Step Activity Log

Record the number of steps you take each day. Remember, there are about 2,000 steps for 1-mile. Everyone that walks the equivalent of 73 miles will be entered in a drawing for two tickets to Six Flags. Have fun walking with your classmates during free time. See how many steps you take each day during school.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## Physical Activity Tips:

- If you can talk while doing a physical activity, you are probably moving at a pace that's right for you.
- If you are too breathless to talk, slow down.
- If you can sing, you may not be working hard enough. So, get moving!


## Top Class Reward:

The class that records the most steps each month will get a popcorn \& movie party!

Week Five Guide

| Day | RHR | Steps/Miles | Time |
| :---: | :--- | :--- | :--- |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |

Weekly Walking Goal: $\qquad$ Weekly Walking Goal: $\qquad$

Week Three Guide

| Day | RHR | Steps/Miles | Time |
| :---: | :--- | :--- | :--- |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |

Weekly Walking Goal: $\qquad$ -

Week Four Guide

| Day | RHR | Steps/Miles | Time |
| :---: | :--- | :--- | :--- |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |

Weekly Walking Goal: $\qquad$

Week One Guide

| Day | RHR | Steps/Miles | Time |
| :---: | :--- | :--- | :--- |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |

Weekly Walking Goal: $\qquad$

Week Six Guide

| Day | RHR | Steps/Miles | Time |
| :---: | :--- | :--- | :--- |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |

Weekly Walking Goal: $\qquad$

## Walking Tips

1.) Begin your walking program slow and easy. It's best to gradually increase your pace and distance walked.
2.) Choose a safe place to walk. (It's best to walk on a flat, firm surface.)
3.) Measure your resting heart rate before you begin. (This can be done by placing your index and third finger on your neck, to the side of your windpipe or by, placing two fingers between the bone and tendon on the thumb side of your wrist. When you feel your pulse, look at a watch and count the number of pulses in fifteen seconds. Multiply this number by four to get your RHR.) A normal RHR is between 60 and 80 beats per minute.
4.) Wear comfortable clothing and shoes, which provide good support and are made with breathable materials.
5.) Drink plenty of water before, during and after exercise, to maintain proper hydration.
6.) Do simple stretches to warm-up your muscles before beginning your walk. This will help prevent injury.
7.) Measure your pulse after you finish your walk. This will help you to monitor your progress over time.

## Breakfast on the go!

Banana Dogs: Spread peanut butter in a whole grain hotdog bun; add a banana and sprinkle with raisins.

Breakfast taco: Sprinkle grated Monterey Jack cheese over a tortilla shell; fold in half and microwave for twenty seconds. Top with salsa.

Shake it up, Baby: Whirl low-fat milk, frozen strawberries, and a banana in a blender for thirty seconds. Slurp it down with a whole- wheat bagel.

Fruit and nut oatmeal: Add dried fruit and almonds to instant oatmeal, and microwave for sixty seconds. Enjoy!

# Introduction to Healthy Lifestyles 

Submitted by: Machelle Gill- Program Assistant<br>County: Gilmer<br>Contact Information: Gilmer County Extension<br>1123 Progress Rd., Ste. A<br>Ellijay, Ga. 30540<br>(706) 635-4426

Grade Levels: 5\& 6
Subject: 4-H Club meeting/ Healthy Lifestyles Program
Estimated Time: 50 minutes
Description/ Lesson Overview: We will introduce the healthy lifestyles' program to the 4 -Hers. We will introduce the Food Guide Pyramid and how it relates to a healthy diet. We will explore portion sizes. We will discuss high nutritional value foods versus low nutritional value foods.

## Goal:

The learner will use the Food Guide Pyramid to make healthy choices in their daily diets. They will also identify standard serving sizes according to the pyramid and compare these to their daily food choices.

## Standards:

GPS; ELA5R3, ELA5W1, ELA5LSV1, ELA5LSV2
QCC; Health-Nutrition 23 / Math-13, 25, 31 / Science- the living world (human body) 23 / Guidance 3 / Character Education- respect 11.1, 11.3, 12.1, 12.2, 13.1, 13.2, 13.3, 14.1 \& 14.3

## Life Skill:

Head: Thinking- decision making, learning to learn. Managing- keeping records, goal setting.
Heart: Relating- Communication.
Hands: Working- Self motivation.
Health: Living- Healthy lifestyle choices. Being- self-responsibility, self-discipline.

## Objectives:

The Learner Will:

1. Understand the Food Guide Pyramid.
2. Be able to identify standard serving sizes.
3. Be able to identify foods with a high nutritional value versus those with a low nutritional value.
4. Understand the importance of including fruits \& vegetables in their daily diet for health.

## Materials:

- Eat Well Friends Magazine
- Food Guide Pyramid
- Daily Food Journals for each 4-Her
- Box of cereal, bowl \& measuring cups
- Pretest
- The clover chronicle


## Preparation:

- Prepare a large copy of the new Food Guide Pyramid.
- Make copies of Healthy Lifestyles Pretest.
- Make copies of the Clover Chronicle.


## Vocabulary:

- Nutrients: Any substance that provides nourishment for the maintenance of life and health.
- High Nutritional Value: Any substance having high levels of nourishment for the maintenance of life \& health.
- Low Nutritional Value: Any substance having low levels of nourishment for the maintenance of life \& health.


## Procedure:

- Have the new officers come to the front and proceed with the club meeting according to the guide. (5 min.)
- Go over the Current issue of The Clover Chronicle. (5 min.)
- Give the students the Healthy Lifestyles pretest and have them fill it out. ( 5 min .)
- Give the students a copy of EAT WELL "Friends magazine."
- Introduce the Food Guide Pyramid. Explain that we will be using the pyramid to determine the kinds and amounts of foods we need to eat each day to be healthy. Show the students the food guide pyramid. Have them identify the different food groups and discuss which foods belong in each category. Discuss the difference between high and low nutritional value foods. ( 15 min .)
- Have two students come to the front and pour the amount of cereal they would normally eat into a bowl. Then ask them to use a measuring cup to determine the exact amount of cereal they eat. Compare the amount to the Food Guide Pyramid serving size recommendations. (5 min.)
- Discuss serving sizes using a marble, tennis ball, three dominoes, CD, small computer mouse, cassette tape \& golf ball. Do the serving size match-up on page 3 of the EAT WELL Magazine. ( 10 min .)
- Give out healthy lifestyles journal. Explain to the students that they will be recording the foods that they eat each day and the amount of activity they are doing each day. Explain that they will be setting goals for each week. Give the students examples of health goals. ( 5 min .)
- Thank the teacher and tell the students when you will be back for the next meeting.


## Assessment:

- Collect the pretest \& compare to the posttest at the end of the program.


## Useful Resources:

- EAT WELL "Friends" magazine
- WWW.Mypyramid.gov
- WWW.acefitness.org
- United States Department of Agriculture * food and nutrition service


# Let's Get moving! 

Submitted by: Machelle Gill- Program Assistant<br>County: Gilmer<br>Contact Information: Gilmer County Extension<br>1123 Progress Rd., Ste. A<br>Ellijay, Ga. 30540<br>(706) 635-4426

Grade Level: 5 \& 6
Subject: 4-H club meeting/ Healthy Life Styles Program
Estimated Time: 50 minutes
Description/ Lesson Overview: We will discuss the importance of including physical activity as a part of maintaining a healthy lifestyle. We will discuss the benefits of walking. We will be giving each 4 -Her a pedometer and we will discuss how it is used.

Goal: The 4-Her will set weekly goals for increasing physical activity. They will identify different forms of physical activity. They will understand the correlation between exercise and maintaining a healthy lifestyle.

## Standards:

GPS: ELA5R3, ELA5R4, ELA5LSV1
QCC: Health-growth \& dev. 7, lifestyle 15, nutrition $20 \& 22 /$ Math- meas. 13, estimation 25, data collection 31 / English- oral communication $1,3,4,11 \& 15 /$ Physical Education- Physical fitness 2,4 \& 5, movement competencies 6 / Guidance- $3,12.4 \& 15.6$

## Life Skill:

Head: Managing- keeping records, goal setting.
Heart: Relating- communication.
Hands: Giving- contributions to group effort.
Health: Living- healthy lifestyle choices.

## Objectives:

The Learner Will:

1. understand that walking is a good form of aerobic exercise.
2. understand that a healthy lifestyle includes at least 60 minutes of physical exercise per day.
3. understand that regular physical activity helps to prevent heart disease, stroke, osteoporosis, reduces blood pressure \& helps to prevent adult onset diabetes.
4. understand the importance of drinking water before, during \& after physical activity.

## Materials:

- Eat Well Friends magazine
- Pedometers for each 4-Her
- Daily food journals
- Walk this way handout
- Clover Chronicle
- Bull dog bucks


## Preparation:

- Make copies of the Walk this way handouts for each 4-Her.
- Make copies of the Clover Chronicle for each 4 -Her.
- Prepare a visual with the vocabulary words and walking contest on it.


## Vocabulary:

- Active: Being in physical motion.
- Obese: extremely overweight.
- Pedometer: A device that measures the number of steps taken while wearing it.
- Physical: Involving activity using the body.
- Technique: Procedure by which a task is performed.


## Procedure:

- Have the officers come to the front and proceed with the club meeting according to the guide. (10min.)
- Go over the current issue of the Clover Chronicle.
- Have the students take out their food journals and Eat Well Friends magazine.
- Explain to the students that we will be discussing the importance of including physical activity in our daily life to maintain a healthy lifestyle.
- Discuss the vocabulary words with the students.
- Brainstorm ways they can include more physical activity each day.
- Introduce the pedometers to the students. Show them how to use it and discuss the walking contest with them.
- Have a student give out the Walk this way handouts and go over with the students.
- Discuss with them the importance of drinking before, during \& after physical activity.
- Discuss with them the role water plays in maintaining your health.
- Have the students write out an activity goal for this week in their food journals. ( 30 min .)
- Thank the teacher and tell the students when you will be back for the next meeting.


## Assessment:

- Have the health officer check the food journals to see who completed their activity goals for the month.
- Have the health officer record the number of steps each class took this month.
- Are the students able to verbalize the importance of being physically active each day?


## Useful Resources:

- Eat Well Friends magazine
- www.acefitness.org (Operation Fit Kids)
- materials developed by Carol A. Rice, Ph. D., R.N., Professor and Health Specialist, Texas Cooperative Extension, The Texas A\&M University System, College Station, Texas, 2004.
- United States Department of Agriculture* Food and Nutrition Service
- www.justmove.org


# Wake-up Your Bodies! 

Submitted By: Machelle Gill- Program Assistant
County: Gilmer
Contact Information: Gilmer County Extension
1123 Progress Rd., Ste. A
Ellijay, Ga. 30540
(706) 635-3294

Grade Level: 5 \& 6
Subject: 4-H Club meeting / Healthy Lifestyles Program
Estimated Time: 50 minutes
Description/ Lesson Overview: We will discuss the importance of beginning the day with a healthy breakfast. We will discuss healthy snacking. We will sample healthy snack options.

Goal: The 4 -Her will understand the importance of breakfast in a healthy diet. They will be able to make smart breakfast and snack choices. The 4 -Her will understand healthy snacking as it relates to the Food Guide Pyramid.

## Standards:

GPS: ELA5R2, ELA5R3, ELA5LSV1, ELA5SLV2
QCC: Character Education 11.2,11.3 / self-knowledge 3 / Health- nutrients 20, 21 dietary guidelines 23 / L. A.- oral communication $3,4,7,8,11 \& 15$, written communication $16,19,22,32 \& 44$ / Science- inquiry 1 living world 23

## Life Skill:

Head: Managing- goal setting, Thinking decision making
Heart: Relating- communication
Hands: Working- self-motivation
Health: Living- healthy lifestyle choices, Being- self-responsibility

## Objectives:

The Learner Will:

1. understand the relationship of eating breakfast to maintaining personal health.
2. Be able to identify healthy snack options according to the Food Guide Pyramid.
3. Experiment with tasting different foods.

## Materials;

- Eat Well Friends magazine
- Food Guide Pyramid
- Daily Food Journals
- The Clover Chronicle
- Bull dog Bucks
- Food samples
- Cups, napkins, small paper plates


## Preparation:

- Make copies of the Clover Chronicle.
- Purchase the ingredients for snacks. Also, purchase paper goods.
- Prepare snack samples.
- Have the health officer assist with preparation and distribution of samples.


## Vocabulary:

Carbohydrate: A substance which provides energy for the body.
Protein: A substance which builds, repairs and maintains body tissues.
Nutrients: Any substance that provides nourishment for the maintenance of life \& health.

## Procedure:

- Have the officers come to the front and proceed with the club meeting according to the guide. ( 5 min .)
- Go over the current issue of the Clover Chronicle. (5 min.)
- Have the students take out their food journals and Eat Well Friends magazine.
- Have them turn to page six in Friends magazine. Discuss with them the importance of including breakfast as a part of a healthy diet. Brainstorm with them examples of healthy breakfast options. Remind them of non-traditional foods that can be healthy breakfast options. ( 15 min .)
- Discuss the role snacking plays in a healthy diet. Ask students to give examples of healthy snacks.
- Discuss with them how making smart snack choices can help them get the servings they need to stay healthy according to the Food Guide Pyramid. (15 min.)
- Give each student a Dixie cup, which contains a cheese cube, wheat cracker \& fruit. Have the students try their snack and discuss why this would be a healthy snack option.
- Thank the teacher and tell the students when you will be back for the next meeting.


## Assessment:

- Check food journals to see if students are eating breakfast.
- Are the students able to verbalize the difference between healthy breakfast \& snack choices and Unhealthy choices?
- Are they able to identify healthy foods?


## Useful Resources:

- Eat Well Friends magazine
- www.acefitness.org (Operation Fit Kids)
- USDA, Food and Nutrition Service
- www.mypyramid.gov


## January Club Meeting

We discussed District Project Achievement. We also discussed how to prepare a demonstration.

We gave a sample presentation about drinks.
"Limiting Sugar" presentation. Ask the students if they can guess which drink has more sugar. (Have a Canned coke, a bottled soft drink, Mountain Dew, SOBE or Red Bull energy drink, Hi-C, Capri sun, bottle of orange juice \& water lined up on a table.) Prepare folded cards, which list the amount of calories, sugar and salt in each drink. Discuss each drink choice with the students. Compare the calories, sugar and sodium amounts in each drink choice. Discuss why it is important to limit the amount of sugar we consume. Discuss what happens in the body when we eat or drink something, which contains a lot of sugar. Discuss which drink choice is the best. Demonstrate to the students how to read a food label.)

# Pump Up the Calcium! 

Submitted By: Machelle Gill
County: Gilmer
Contact Information: Gilmer County Extension
1123 Progress Rd., Ste. A
Ellijay, Ga. 30540
(706) 635-4426

Grade Level: 5 \&6
Subject: 4-H club Meeting / Healthy lifestyles
Estimated Time: 50 minutes
Description/ lesson Overview: We will be discussing the importance of calcium in a healthy diet. We will also be discussing strength training as a part in maintaining healthy muscles.

Goal: The 4-H'er will understand why it is important to get calcium in their diet. The student will be able to identify foods that have high calcium content. The 4 -H'er will understand why it is important to include strength-training exercise to maintain muscle development.

## Standards:

GPS: ELA5R3, ELA5LVS1, ELA5LVSR2
QCC: L.A. $1,3,4,5,8,9,10,11,15,16,20 /$ Health-nutrition $20,22 /$ Science $22 /$ P.E.- 1,4,5

## Life Skill:

Head: Managing- goal setting, Thinking decision making
Heart: Relating- communication
Hands: Working- marketable skills
Health: Living- healthy lifestyle choices, disease prevention / Being- self-responsibility, self-discipline

## Objectives:

The Learner Will:

1. Understand the role calcium plays in maintaining good health.
2. Be able to identify foods with a high calcium content.
3. Understand the role strength-training plays in maintaining strong muscles.

## Materials:

- Eat Well Friends magazines
- ‘Test Your Calcium I.Q.' worksheet
- Operation Fit Kids Curriculum (lesson 2 \& 4)
- Visual aid on exercising safely
- Resistance Bands
- Index Cards with different activities listed on each card.
- The Clover Chronicle
- DPA sign-up sheets
- Bull dog bucks


## Preparation:

- Make index cards with different physical activities listed on each one.
- Prepare visual aid on safe exercise.
- Prepare visual aid with the vocabulary listed.
- Make Copies of the Clover Chronicle.


## Vocabulary:

Heart- Your body's pump, responsible for pumping blood, oxygen, and nutrients to your body systems. Aerobic Exercise- Exercise that requires oxygen at the cellular level and is of a low-to-moderate intensity level that can be done for an extended period (for example, walking, biking, or swimming).
Anaerobic Exercise- Exercise that does not require oxygen at the cellular level and is of a high intensity level that can only be done for short amounts of time (for example, sprints, or weight lifting).
Bones- the hard, living tissue that makes up the skeleton of the body.
Muscle- Expandable body tissue that enables body parts to move. Our muscles are connected to our bones.
Calcium- A soft silvery white element that is an alkaline earth metal. It is essential to the formation of bones and teeth.
Contract- To tighten or tense a muscle.
Tendons- Connect muscle to bone.
Repetition- Activities performed repeatedly, a certain number of times (for example, 10 pushups).
Strength- The state of being strong.
Integrity- The quality of possessing and steadfastly adhering to high moral principles or professional standards.

## Procedure:

- Have the officers come to the front of the room and proceed with the meeting according to the guide.
- Give out the Clover Chronicle.
- Sign-up any new students for DPA. (10 minutes)
- Have the 4-H'ers open Their Eat Well 'Friends' to page 8. Discuss the vocabulary words with them.
- Explain the difference in Aerobic and Anaerobic exercise. Tell them that we will be learning about anaerobic exercise today.
- Give out the index cards with the different activities listed on them. Have the students with the cards divide themselves into aerobic and anaerobic categories. Ask the students to explain why their activity is aerobic or anaerobic. ( 15 minutes)
- Introduce the students to the resistance bands. Demonstrate how to use them. Discuss with them the importance of including strength-training exercises in maintaining a healthy body. Discuss other methods of strength training. ( 10 minutes)
- Explain the role Calcium plays in the body. Discuss what happens to your body when it does not get enough Calcium. Have the students turn to page 10 of their 'Friends' magazine. Have the student's brainstorm a list of foods that are rich in calcium.
- Discuss with them the recommended daily amounts of calcium they need to maintain their health. (15 minutes)
- Thank the teacher and tell the students when you will be back for the next meeting.


## Assessment:

- Are the students able to demonstrate the resistance exercises discussed?
- Are the students able to verbalize the difference between aerobic and anaerobic exercise?
- Are the students able to verbalize the role calcium plays in a healthy lifestyle?


## Useful Resources:

- Eat Well Friends magazines
- www.nationaldairycouncil.org- www.mypyramid.gov - www.acefitness.org / Operation Fit Kids


## March Club Meeting

## We discussed Cloverleaf Summer Camp. We also discussed being heart healthy.

2. understand that physical activity is necessary in maintaining heart health.
3. Understand the role diet plays in maintaining heart health.

## Vocabulary:

- Heart: A hollow muscular organ that pumps blood around the body.
- Heart Disease: Any condition which impairs cardiac functioning.
- Stroke: Sudden stoppage of blood flow to the brain.
- Show the heart health visual and discuss with the students ways to be heart healthy.
- Discuss with them the importance of aerobic exercise in being heart healthy.
- Discuss the kinds of diseases people get from neglecting heart health. (20 minutes)


## Assessment:

- Check the 4'Hers food \& activity journals.
- Are the students able to identify ways in which they can be heart healthy?
- www.americanheart.org
- www.justmove.org


## EAT WELL <br> 4-H HEALTHY LIFESTYLES <br> Pretest

| You should wash your hands with cold running water and soap for at least 20 seconds. | true |
| :---: | :---: |
| Weight-bearing exercises, like walking or running, can help build and keep bones healthy. | true |
| People do not need to worry about getting enough calcium in their diets until after age 50. | true |
| Orange and green leafy vegetables are good for keeping your eyes and skin healthy. | true |
| Walking 2000 steps is equal to approximately 1 mile. | true |
| Chocolate milk and soft drinks are about the same nutritionally. | true |
| A cup of chocolate milk has the same amount of calcium as a cup of plain milk. | true |
| Four cups of water a day is enough to keep healthy. | true |
| A 12-ounce soda contains about 5 teaspoons of sugar. | true |
| If you eat more food (calories) than your body needs, the extra calories get stored as body fat. | true |
| A small order of French fries is considered a healthy snack. | true |
| One serving of meat is about the size of a deck of cards or a cassette tape. | true |
| Drinking orange juice is better for you than eating an orange. | true |
| It is recommended that you should be physically active throughout the day enough to add up to 60 minutes, most days of the week. | true |
| It is okay to skip breakfast if you are going to eat a big lunch. | true |

## Name

 Teacher $\qquad$Date $\qquad$

## EAT WELL <br> 4-H HEALTHY LIFESTYLES <br> Posttest

You should wash your hands with cold running water and soap for at least 20 seconds.
Weight-bearing exercises, like walking or running, can help build and keep bones healthy.
People do not need to worry about getting enough calcium in their diets until after age 50.
Orange and green leafy vegetables are good for keeping your eyes and skin healthy.
Walking 2000 steps is equal to approximately 1 mile.
Chocolate milk and soft drinks are about the same nutritionally.
A cup of chocolate milk has the same amount of calcium as a cup of plain milk.
Four cups of water a day is enough to keep healthy.
A 12-ounce soda contains about 5 teaspoons of sugar.
If you eat more food (calories) than your body needs, the extra calories get stored as body fat.
A small order of French fries is considered a healthy snack.
One serving of meat is about the size of a deck of cards or a cassette tape.
Drinking orange juice is better for you than eating an orange.
It is recommended that you should be physically active throughout the day enough to add up to 60 minutes, most days of the week.

It is okay to skip breakfast if you are going to eat a big lunch.

## Because of these 4-H meeting on Healthy Lifestyles, how likely are you to:

-Drink more water.
-Eat a healthy breakfast daily.
-Eat 3 foods rich in calcium every day.
-Drink less sugary drinks like sweet tea and soda.
-Choose the regular size foods instead of the deluxe and super sizes.
-Spend less time watching TV, and sitting and lying around.

| Less Likely | Unsure | More Likely |
| :--- | :--- | :--- |
| Less Likely | Unsure | More Likely |
| Less Likely | Unsure | More Likely |
| Less Likely | Unsure | More Likely |
| Less Likely | Unsure | More Likely |
| Less Likely | Unsure | More Likely |

Tell one thing you have learned from the classes on Healthy Lifestyles.

Name Teacher $\qquad$
Date $\qquad$

There were 243 4-H participants in this program.

## PROGRAM IMPACT

- Participants Improved Their Knowledge of Health Habits

The comparison of pre- and post-test knowledge score means shows that the participants significantly improved their knowledge of eating healthy as summarized in the following table and chart.

## Comparison of Participant's Knowledge Before and After the Program

| Percentage of Participants <br> Who Improved Their <br> Knowledge | Mean of the <br> Knowledge Test <br> Score Before the <br> Program | Mean of the <br> Knowledge Test <br> Score After the <br> Program | Significance p |
| :---: | :---: | :---: | :---: |
| $89 \%$ | $69 \%$ | $90 \%$ | $.000^{*}$ |

* Mean difference is statistically significant at $\mathbf{p}=.01$ (2tailed).
Comparison of Participant's Knowledge Before and After the Program



## - Potential Practice Changes for Participants:

## At the end of the program:

o $77 \%$ of the participants indicated that they are more likely to drink more water.
o $76 \%$ of the participants indicated that they are more likely to eat a healthy breakfast daily.
o $58 \%$ of the participants indicated that they are more likely to eat 3 foods rich in calcium every day.
o $45 \%$ of the participants indicated that they are more likely to drink less sugary drinks like sweet tea and soda.
o $55 \%$ of the participants indicated that they are more likely to choose the regular size foods instead of the deluxe and super sizes.
o $59 \%$ of the participants indicated that they are more likely to spend less time watching TV and sitting and lying around as shown in the chart below.

Participants' Practices as a Result of the Program


## - Participants' Comments

o What Participants Learned from the Program:

- How to eat healthy. (54 participants mentioned this)
- Get more exercise/stay active. (57 other individuals mentioned this)
- Not to eat too much sugar. (5 people stated this)
- How camp is.
- How important it is to eat breakfast. (21 individuals mentioned this)
- I learned that there are about 2,000 steps in a mile. (2 other participants made this statement)
- Don't eat a lot of junk food. (5 other people stated this)
- Drink more water. (16 other participants mentioned this)
- I learned about calcium and about how it helps you. (6 other people mentioned this)
- To eat fruits and veggies. (2 other participants mentioned this)
- You need 1 hour of exercise.
- You need a certain amount of calories (1200-1800). (1 other person stated this)
- You should stay in shape all of your life.
- Soft drinks are unhealthy. (6 other individuals made this comment)
- How the Food Pyramid works.
- About serving sizes. (13 other participants mentioned this)
- That extra calories are stored as fat. (1 other person stated this)
- You should eat more fruit than fruit juice. (6 other participants mentioned this)
- How to loose weight and stay healthy. (14 other participants mentioned this)
- How to balance meals. (1 other participant mentioned this)
- Brush your teeth every day!
- Do everything you can to stay healthy like get good grades, and be healthy for yourself and your family.

