

Interest Project Patch for  
Cadette and Senior Girl Scouts

# Best Bones Patch Booklet



Developed by the

New Jersey Department of Health  
Osteoporosis Advisory Committee

in cooperation with the  
New Jersey State Girl Scout Program Cluster

This booklet belongs to:

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Troop # \_\_\_\_\_

## Best Bones Interest Project Patch for Cadette and Senior Girl Scouts

We take many things for granted in life. For instance, have you ever thought about your bones? Bones are the frame work of your body. Strong bones will help you look and feel your best. Osteoporosis, or porous bones, is a gradual loss of bone mass that causes bones to become brittle and susceptible to fracture. You can prevent osteoporosis from happening to you when you get older by building strong bones now.

Purpose: To educate girls and adults about osteoporosis, including risk factors, diagnosis, prevention, and treatment.

Requirements: Complete eight (8) activities, including the four (4) with a single asterisk (\*), and one (1) with a double asterisk (\*\*).

Notes: To get the best experience from this interest project you will need a mentor (someone to offer advice and guidance). This project should be done as a troop/group project. To obtain your patch, you must complete a questionnaire before starting and after completing this project.

Place an X in the box when the activity is completed:

- ? \* 1. Learn about osteoporosis. How it is diagnosed, treated and prevented? Discuss your findings with your mentors and peers.
- ? \* 2. Complete the questionnaire to find out your risk of developing osteoporosis. Have another person complete the Risk Assessment Tool, such as a family member, friend, or neighbor. Compare your answers. Discuss with your peers which factors you can control and those you cannot.
- ? \*3. Learn about the role of calcium in osteoporosis, and how to ensure you're getting the recommended amount of calcium. Have your troop/group, including yourself, complete the questionnaire and evaluate your current calcium intake. Based on the results, have each person develop a plan to increase calcium in her diet, if needed.
- ? \* 4. Learn about weight-bearing exercise and how it relates to osteoporosis. Keep an exercise log for one week. Calculate the time you spent in weight-bearing exercise. Develop a plan to increase your weight-bearing activities, if needed.
- ? 5. Learn about densitometry and other ways of diagnosing osteoporosis. Discuss the diagnosis of osteoporosis with your troop/group.
- ? 6. Learn about health professionals who work with osteoporosis.
- ? 7. Learn more about one of the following topics: Bone remodeling, weightlessness and astronauts, or current treatments for osteoporosis. Share this information with your troop/peers.

- ? 8. Communicate with your legislators about the importance of osteoporosis as a woman's health issue.  
**Do one of the following activities only after you have completed activities #1, #2, #3, and #4.**
- ? \*\* 9. Plan and present an educational program on osteoporosis to middle-aged adults.
- ? \*\* 10. Compile a directory of osteoporosis services provided in your area. Review the directory with your mentor. Develop a list of agencies and individuals with whom you can share the directory, and distribute the directory to them.
- ? 11. Evaluate the safety of your own home, or the home of your grandmother, other elderly relative, or elderly friend using a home safety guide. Discuss your findings with your mentor. Develop a plan with recommendations for changes to ensure a safe environment.
- ? 12. Plan a health fair for your community.
- ? 13. Develop a public service announcement (P.S.A.) to distribute information about osteoporosis.

My signature \_\_\_\_\_

Leader's signature \_\_\_\_\_

Date badge completed \_\_\_\_\_

# Best Bones Interest Project

## Pre-Project Questionnaire

This questionnaire should be completed **BEFORE** you begin doing activities for the Best Bones Interest Project. You must **return the completed form to your troop leader prior to the start of the project** in order to be eligible to receive the Best Bones patch. This same questionnaire will be distributed after completion of the project to see how much you have learned and whether you have changed your behaviors.

### Circle the answer to each question.

1. Have you, or has anyone in your family, been diagnosed as having osteoporosis?

YES

NO

2. How many times per week do you participate in any weight-bearing exercises such as walking, jogging, or aerobic dance totaling 45 minutes or longer?

a. 1-2

b. 3-4

c. 5-7

d. none

3. How many 1 ounce servings of cheese, 8 ounce servings of milk (whole, 2%, 1%, skim) or 8 ounce servings of yogurt do you consume each day?

a. 1-2

b. 3-4

c. 5-7

d. none

4. How many servings of the following foods do you consume each day: 3 ounces canned salmon or sardines (with bones); 1 cup greens such as collards, broccoli, kale; 4 ounces tofu made with calcium salts?

a. 1-2

b. 3-4

c. 5-7

d. none

5. Do you eat or drink any calcium fortified foods such as orange juice, bread, or cereals?

YES

NO

6. Do you take any pills/supplements that have calcium in them to keep your bones strong?

YES

NO

Name \_\_\_\_\_

Troop/Group # \_\_\_\_\_

Age: \_\_\_\_\_ Level: \_\_\_\_\_

Race/Ethnicity: White \_\_\_\_\_ Hispanic \_\_\_\_\_ African American \_\_\_\_\_ Asian \_\_\_\_\_ Other \_\_\_\_\_  
(specify)

# Best Bones Interest Project

## How Much Do I Know About Osteoporosis?

Circle the most appropriate answer.

1. Osteoporosis is caused by a loss of:
  - a. Calcium from the bones
  - b. Iron from the blood
  - c. Sodium from the tissues
  
2. Which of the following are considered risk factors for osteoporosis?
  - a. Female, white, Asian
  - b. Thin and small bone framed
  - c. Smoking and excess alcohol consumption
  - d. All of the above
  
3. Which foods provide most of the calcium in our diet?
  - a. Breads and starches
  - b. Meat, fish, poultry, and beans
  - c. Fruits and vegetables
  - d. Milk and dairy products
  
4. Weight bearing exercise helps to build bone mass in the young and prevent its excessive loss in the old. Examples of weight-bearing exercises include:
  
5. The strength and thickness of human bones is favorable affected by which of the following:
  - a. Adequate amounts of vitamin D in foods
  - b. Normal menstrual cycle in women
  - c. Estrogen replacement therapy in post-menopausal women
  - d. All of the above

# Best Bones Interest Project

## Am I At Risk For Osteoporosis?

Please complete the following questionnaire to determine your risk for developing osteoporosis.

- |   |     |    |
|---|-----|----|
| 1. Are you female?  | YES | NO |
| 2. Are you Caucasian or Asian?  | YES | NO |
| 3. Are you 35 years of age or older?  | YES | NO |
| 4. Do you have a family history of osteoporosis?  | YES | NO |
| 5. Have you had an early or surgically induced menopause, or irregular or cessation of menses?        | YES | NO |
| 6. Do you smoke cigarettes?   | YES | NO |
| 7. Is your diet low in sources of calcium such as dairy products?                                     | YES | NO |
| 8. Do you exercise less than 3 times a week?  | YES | NO |
| 9. Do you have a small, thin frame?   | YES | NO |
| 10. Do you consume two or more alcoholic drinks a day?  | YES | NO |
| 11. Have you been taking thyroid medication or cortisone-like drugs for asthma, arthritis, or cancer? | YES | NO |

To score: If you answered **YES** to two (2) or more questions, you are at risk for developing osteoporosis. The more **YES** responses you have, the greater your risk.

## Best Bones Interest Project

### How Much Calcium Do I Eat?

Here is a quick way to see how much calcium you are getting. Circle the foods you ate yesterday. Write in the number of servings you ate of these foods. Total the number of servings. Multiply the totals by the milligrams of calcium for each group. Add the total milligrams to find your actual calcium intake for the day.

Food	Serving Size	Number of Servings	Calcium (Milligrams)	Total Calcium (Milligrams)
• Plain lowfat yogurt . . . . .	1 cup	_____		
• Nonfat dry milk power . . . . .	½ cup	_____		
• Canned sardines (with bones) . . . . .	3 oz.	+ _____		
<b>Total Servings</b>		_____	x 400 =	_____ mg
• Fruit flavored yogurt . . . . .	1 cup	_____		
• Skim, lowfat milke, buttermilk . . . . .	1 cup	_____		
• Whole milk, chocolate milk . . . . .	1 cup	_____		
• Parmesan cheese (grated) . . . . .	¼ cup	_____		
• Swiss cheese . . . . .	1 oz.	+ _____		
<b>Total Servings</b>		_____	x 300 =	_____ mg
• Cheese (all other hard cheeses) . . . . .	1 oz.	_____		
• Pancakes . . . . .	3	+ _____		
<b>Total Servings</b>		_____	x 200 =	_____ mg
• Canned pink salmon (with bones) . . . . .	3 oz.	_____		
• Collards or turnip greens, cooked . . . . .	½ cup	_____		
• Tofu (processed with calcium) . . . . .	4 oz.	+ _____		
<b>Total Servings</b>		_____	x 150 =	_____ mg
• Ice cream, or ice milk . . . . .	½ cup	_____		
• Spinach, cooked . . . . .	½ cup	_____		
• Broccoli, cooked . . . . .	½ cup	+ _____		
<b>Total Servings</b>		_____	x 75 =	_____ mg
• Almonds . . . . .	1 oz.	_____		
• Chard, cooked . . . . .	½ cup	_____		
• Cottage cheese . . . . .	½ cup	_____		
• Corn tortilla . . . . .	1 med.	_____		
• Orange . . . . .	1 med.	_____		
• Kidney, lima, or navy beans, cooked . . . . .	½ cup	+ _____		
<b>Total Servings</b>		_____	x 50 =	_____ mg
• Carrot, raw . . . . .	1 med.	_____		
• Dates or raisins . . . . .	¼ cup	_____		
• Egg . . . . .	1 large	_____		
• Whole wheat bread . . . . .	1 slice	_____		
• Peanut butter . . . . .	2 tbsp.	+ _____		
<b>Total Servings</b>		_____	x 25 =	_____ mg
My actual calcium intake . . . . .				_____
Less my RDA for calcium . . . . . (minus) -				_____
The difference is . . . . . =				_____

Compare your results with the Recommended Calcium intake chart provided by your Leader. If the difference between your actual calcium intake and the Recommended Calcium Intake is zero or a positive number, then your dietary intake of calcium is adequate. If it is a negative number, then you are not eating enough calcium rich foods.

Used with the permission of the Dairy Council.

## Exercise Frequency Log

Keep a log of your exercise for one week. Record the number of minutes you spend doing any of the following activities each day. At the end of the week, total up the number of minutes you participated in each activity for the week. Then, at the bottom, total up the total minutes you participated in all activities for the week.

Exercise Activity	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total for Week
Walking/Hiking								
Aerobics/Dance								
Jogging/Running								
Stair Climbing								
Racket sports								
Hockey								
Soccer								
Volleyball								
Basketball								
Softball								
Skiing/Nordic skier								
Weight lifting								
Stepping								
Total minutes for day								

If the total number of minutes you participated in a weight-bearing activity does not come to 45 minutes a day at least 5 days a week, you are not doing enough weight-bearing exercise. You need to increase the amount of time you spend on these activities.

# Best Bones Interest Project Post-Project Questionnaire

Please complete this questionnaire.

## Circle the answer to each question.

1. Have you, or has anyone in your family, been diagnosed as having osteoporosis?

YES

NO

2. How many times per week do you participate in any weight-bearing exercises such as walking, jogging, or aerobic dance totaling 45 minutes or longer?

a. 1-2

b. 3-4

c. 5-7

d. none

3. How many 1 ounce servings of cheese, 8 ounce servings of milk (whole, 2%, 1%, skim) or 8 ounce servings of yogurt do you consume each day?

a. 1-2

b. 3-4

c. 5-7

d. none

4. How many servings of the following foods do you consume each day: 3 ounces canned salmon or sardines (with bones); 1 cup greens such as collards, broccoli, kale; 4 ounces tofu made with calcium salts?

a. 1-2

b. 3-4

c. 5-7

d. none

5. Do you eat or drink any calcium fortified foods such as orange juice, bread, or cereals?

YES

NO

6. Do you take any pills/supplements that have calcium in them to keep your bones strong?

YES

NO

Name \_\_\_\_\_

Troop/Group # \_\_\_\_\_

Age: \_\_\_\_\_ Level: \_\_\_\_\_

Race/Ethnicity: White \_\_\_\_\_ Hispanic \_\_\_\_\_ African American \_\_\_\_\_ Asian \_\_\_\_\_ Other \_\_\_\_\_  
(specify)