



Be a Bone Builder

Building your bones when it counts

2019



NC STATE

EXTENSION

NC Osteoporosis
FOUNDATION



Strong Bones for Life.

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A. Background

A.1. About Osteoporosis and Prevention

Osteoporosis is a disease of the bones. It is characterized by low bone mineral density, resulting when too much bone mass is lost, too little is made, or both. Low bone density causes bones to become fragile and increases their risk of fracture. Often referred to as a “silent disease,” osteoporosis progresses without any noticeable symptoms until a fracture occurs, there is an observable change in height, or a medical test detects it.

Osteoporosis bone fractures can be painful and costly, debilitating, and in extreme cases, lead to death. Fractures of the hip and spine are of particular concern. The financial costs associated with osteoporosis and related bone fractures are significant. Ninety percent of hip fractures are due to osteoporosis; only stroke occupies more hospital bed days than hip fractures each year. Fifty percent of people who fracture a hip will be unable to walk without assistance. About one in five people over the age of 50 with hip fracture die in the year following their fracture due to medical complications; half cannot walk without aid; and a quarter require long-term care. Fractures of the spine also can have serious consequences, including chronic back pain and disability. They have been linked to increased risk for death among older people. (National Osteoporosis Foundation, www.nof.org)

Osteoporosis can affect children and adults of both sexes. However, it is most common among thin, post-menopausal Caucasian and Asian women.

Numerous factors affect bone density throughout the life span. Genetics is most commonly the cause of primary osteoporosis, while other disorders, medication, and lifestyle habits such as inadequate diets resulting in poor nutrition and inactivity can account for secondary osteoporosis. Unlike gender and genes, lifestyle habits are modifiable. Healthy habits like regular physical exercise that involve some weight bearing activity, eating calcium-rich foods, getting adequate vitamin D from foods, exposure to the sun or through supplements, and avoiding excessive alcohol and smoking are protective factors against osteoporosis later in life.

There is mounting evidence suggesting that the antecedents of osteoporosis are evident early in life. While the prenatal period is critical for skeletal development and metabolic systems programming, bone mass accumulates throughout childhood and adolescence and peaks around age 20, when growth has concluded. Bone formation and reabsorption are generally in balance up to the mid-adult years when, for a variety of reasons including aging, bone mass is typically lost quicker than it is accrued. (Bone Health and Osteoporosis: A Report of the Surgeon General, 2004). **Therefore, childhood and adolescence are ideal times to focus on building bone mass and reducing the risk of developing osteoporosis and related fractures later in life.**

A.2. History of the **Be a Bone Builder** Program

***"Osteoporosis is a disease of youth,
but you don't know you have it until you're older."***

**Dr. Vercie Eller, RN, EdD
Board Member of NCOF &
Retired State Education Director, Nursing and Allied Health Education Programs,
NC Department of Community Colleges**

In 2010, Dr. Jacquelyn McClelland, Professor and Nutrition Specialist, North Carolina State University, and Chair of the North Carolina Osteoporosis Foundation (NCOF), co-authored a grant and received funding from the Cape Fear Memorial Foundation for the NCOF to provide osteoporosis education in five southeastern North Carolina (NC) counties (New Hanover, Brunswick, Pender, Onslow, and Duplin Counties). The NCOF hosted a one-day training and invited interagency teams interested in osteoporosis from the five counties. The training included the following presentations and speakers as well as an afternoon session to initiate development of proposals for individual county osteoporosis programs and activities. Training agenda included:

Charge to the Counties by Stephanie Jones, MS, Administrative Assistant of the NCOF and Parenting Educator & Family Life Consultant

Osteoporosis Overview (including prevention, management and treatment) by James D. Hundley, MD, Board Member of the NCOF and retired orthopedic surgeon

Resources on Osteoporosis by Jacquelyn McClelland, PhD, Chair of the NCOF and Professor and Nutrition Specialist, North Carolina State University

ENAFS Healthy Living Program: Fall Prevention by Jacquelyn McClelland, PhD, Chair of the NCOF and Professor and Nutrition Specialist, North Carolina State University

A Matter of Balance, Physical Activity and Falls by Kathy Shipp, PT, MHS, PhD, Board Member of the NCOF and Assistant Professor, Division of Physical Therapy, Department of Community and Family Medicine, Duke University

County Teams Develop Their Individual Osteoporosis Plans guided by the above speakers as well as by Vercie Eller, RN, EdD, Board Member of NCOF & Retired State Education Director, Nursing and Allied Health Education Programs, NC Department of Community Colleges

County teams were comprised primarily of health department staff and active and retired Cooperative Extension Family and Consumer Science (FCS) agents, as well as 4-H program staff. Each team was charged with creating a proposal to develop and deliver osteoporosis and falls prevention programs in their home county. Each team initiated their planning at the training and later (within 2 weeks) finalized and submitted their proposal to the NCOF for funding to conduct their program.

One proposal that was funded eventually led to the development of the current **Be a Bone Builder** curriculum. Cheryle J. Syracuse, MS, Professor Emeritus, The Ohio State University, who retired to Brunswick County, NC, led that team to propose, receive funding for, and conduct a number of successful, well-attended programs. Their osteoporosis prevention and living with osteoporosis programs were enthusiastically attended by older women, many of whom already had been diagnosed with the disease. However, few men or youth attended.

Syracuse and Angie Lawrence, Brunswick County 4-H Program Assistant, explored ways to reach younger audiences, in the hope of helping young people establish practices early enough in life to make a difference and improve their lifelong bone health. Their effort coincided with the development of a new 4-H Teens in Leadership Training (TiLT) program. To initiate the TiLT program, a weekend retreat was planned to teach teens about leadership and develop their skills to be leaders.

This first annual TiLT retreat was held in February, 2012. Fourteen youth ages 13-18 attended the retreat. In addition to sessions on leadership, participants attended a lesson on osteoporosis presented by two teens and a calcium lesson to encourage eating calcium-rich foods led by Syracuse. Following the presentations, teens created yogurt sundaes, learned a bone-building dance, and reviewed educational materials about bone health.

The teens worked together over the course of several months to develop and refine a lesson plan for teaching elementary school-age children about bone health. They incorporated children's books, calcium-related visual aids, other bone health teaching tools, physical activity, and a calcium-rich snack.

The teens' final lesson plan and teaching kit included:

- A children's story book entitled "Why did my Bones Break?"
- A lesson about the importance of calcium, the need for vitamin D, and the importance of daily physical activity
- A dance to encourage physical activity
- A "bone bank" to teach the importance of "banking" strong bones as they grow
- A parent packet for the kindergartners to take home.

In May of 2012, during Osteoporosis Awareness and Prevention Month, Brunswick County 4-H staff approached Brunswick County Schools, offering the service of the trained youth leaders to present the lesson to students in kindergarten classrooms. Because healthy eating and physical activity are part of the required school curriculum for kindergarten students in NC, school administration and teachers were receptive to the teens presenting these topics to school children.

The program has continued since then with new teens being trained in bone health and how to teach the lesson. Additional training materials have been developed to teach new teens joining the leadership program. These include a self-study guide and small group learning activities training. Each year lessons learned have been integrated to improve the program. The lesson has also been taught by the TiLT youth to young children attending 4-H summer day camps in Brunswick County.

Due to Brunswick County success, Dr. Jacquelyn McClelland, Professor and Nutrition Specialist at North Carolina State University (NCSU) and NCOF Board member, committed to seeing that it had a wider distribution so more people could benefit from it. Thus, she facilitated a partnership between NCSU and the NCOF to support the process, which resulted in the development of a curriculum that was packaged for distribution and named "***Be a Bone Builder.***"

B. Getting Started

B.1. Program Concepts

B.1. a. RATIONALE

Osteoporosis, once thought to be a condition of the elderly, is now recognized as a lifelong issue because the bone density in older age largely depends on the bone mass achieved by adolescence or young adulthood (van der Sluis & de Muinck Keizer-Schrama, 2001). Bone mass increases progressively during childhood but mainly during adolescence when there is a substantial (approximately 40% of total bone mass) accumulation (Baroncelli, Bertelloni, Sodini, & Saggese, 2005). Up to 90 percent of peak bone mass is acquired by age 18 in girls and by age 20 in boys, which makes youth the best time to “invest” in one’s bone health (NIAMS, 2012). If not enough bone is built in these early years, later in life when the body draws calcium out of the bone for other uses, the bones will become too thin and frail, lacking the infrastructure needed to withstand impacts. Because of this, osteoporosis prevention programs should target youth.

B.1.b. GOAL AND OBJECTIVES

Goal: The goal is to build strong bones in individuals starting at the kindergarten age or thereafter as young an age as possible for the greatest benefit.

Overall Objectives: The overall objectives include increasing the target audiences':

- awareness of the importance of building strong bones starting during one’s youth
- knowledge of the need for modifiable factors that can help build strong bones such as:
 - appropriate consumption of calcium rich foods
 - safely acquiring adequate vitamin D
 - getting optimal exercise
- appropriate behavior related to:
 - physical activity
 - consuming calcium-rich foods
 - safely getting adequate vitamin D

Specific Objectives for each target audience are included after the Programmatic Details (B.1.e. and B.1.f.).

B.1 c. PROGRAMMATIC DETAILS

Be a Bone Builder (BBB), a multi-faceted program, focuses on building bones when it counts using age appropriate materials. The program involves the recruitment and training of volunteers who teach bone health to a younger audience. It bridges age barriers by reaching elementary school-age youth, older youth, and adults with knowledge acquisition occurring across age groups.

Be a Bone Builder logo

The ***BBB*** logo was specially designed for use with the ***BBB*** program. Permission is granted for its use with this program, but recognition should be given to NCSU and NCOF for its development.

Bone Replicas/models

Bone replicas (osteoporotic and normal) are available from supply stores that sell teaching or health education aids. It may also be possible to obtain promotional items from pharmaceutical companies. If replicas are not available then sponges may be used, a “natural” sponge has open pores that can represent an osteoporotic bone and a manmade kitchen-type sponge with tighter cells can represent the normal bone.

Calcium-rich Food Samples

Providing a calcium-rich food sample to the children emphasizes the importance of calcium-rich food and allows them to taste one such food. If the number of kindergarten students is large then this could be costly. Providing food samples is recommended but can be omitted. Things to consider when providing food are student allergies, school policies, how to safely store and transport it, and how it will be distributed. Low-fat string cheese is an ideal sample because it's individually packaged in small quantities making it easy to transport and distribute. Other calcium-rich food sample options include: low-fat, lower sugar yogurt tubes, cups and frozen yogurt; ice cream cups; and milk. Arranging in advance to purchase samples from the school's cafeteria is convenient and would eliminate food safety issues. Cheese packets may be available free of charge from Cabot Cheese.

FOOD SAFETY

- Dairy products such as milk, cheese, and yogurt should be stored at less than 40° Fahrenheit.

Be A Bone Builder

The **BBB** program is modeled on the lessons developed in Brunswick County, NC by 4-H staff and TiLT youth volunteers.

Fostering Leadership

Fostering leadership skills in youth was one of the goals of the original model. In addition to learning about osteoporosis and bone health, the 4-H TiLT youth were trained in communication and public speaking techniques, team building, and youth development, among other topics. While not necessarily a focus, the **BBB** program promotes youth leadership development, if involving youth as Program Volunteers.

Music and Dancing

Physical activity is commonly recommended to promote health and well-being. The **BBB** lesson incorporates physical activity in the form of dancing to encourage Program Volunteers and children to get active to help build strong bones. Refer to Physical Activity for Strong Bones (C.3.f.).

Ideas for incorporating movement and dancing include:

- The *Freeze Dance* (based on the original song by J. Geils Band) is on a kid's party mix CD called "This is What Kids Call Music." The song is available for download from Amazon.
- The *Best Bones Forever* (<http://www.bestbonesforever.gov>) program, sponsored by the Office of Women's Health, developed an "official dance" that was performed at the White House with Michelle Obama during the President's Council on Fitness, Sports and Nutrition Meeting in 2011. Instructions for this dance are online at <http://www.youtube.com/watch?v=TBYGjAzuu2E>
- *Dem Bones* is a popular Halloween song. A graphic video and dance with basic movements are at <http://www.youtube.com/watch?v=e54m6XOpRgU> (aka The Skeleton Dance) and <http://supersimplelearning.com/songs/themes-series/halloween/the-skeleton-dance/>
- The children's book used in the lesson, "*Why Did My Bone Break?*", can be purchased as a kit that includes a CD containing the song and dance *Rubberband Man*.

National Osteoporosis Awareness and Prevention Month

May is National Osteoporosis Awareness and Prevention Month. The timeline has been developed to culminate the **BBB** program during May.

Obtaining Commitment

Getting school administrator and teacher commitment is essential to successful program delivery. Doing this early in the school year before beginning recruitment and training of Program Volunteers is recommended. Sample letters are provided and can be customized.

Program Delivery

Kindergarten classroom presentations are one option for program delivery of **BBB**. Presenting to home school groups, scouts or 4-H clubs, pre-school classes, after school programs or clubs, and summer day camp programs are other options.

Program Facilitator

The Program Facilitator is crucial to the success of **BBB** program. He or she is responsible for coordinating all aspects of the program. The Program Facilitator could be an Extension FCS or 4-H agent or program assistant, or someone with experience coordinating health and wellness programs and managing volunteers. The Program Facilitator could be a paid employee, consultant, or a volunteer.

Parent Packet

Parent Packets raise parents' awareness of the **BBB** program and include information to increase parents' knowledge of bone health and promote family activities to support strong bones. Small bags with the **BBB** logo can be purchased or other bags can be used. North Carolina Extension bags and 4-H litter bags have been used. In addition to **BBB** program materials, promotional materials about the sponsoring organization or club can be included. Seek out free items to include in the Parent Packets such as those available from the Best Bones Forever program and Southeast United Dairy Industry Association (See C.3.a.). Section F.5. lists suggested items to include in Parent Packets.

Program Volunteers

Program Volunteers are specially trained to teach younger audiences about bone health. The original model engaged teenagers in a 4-H youth development and leadership program. It was designed as a 4-H Try-it program where teens were taught about bone health and they in turn taught younger youth.

Training the Program Volunteers in osteoporosis and bone health raises their personal knowledge and gives them necessary background knowledge to present **BBB** to the kindergarteners.

In the past, the kindergarten students were very receptive and enjoyed being taught by teenagers. The logistics of getting teenagers out of school to go to the kindergarten classrooms can be difficult due to school schedules and student release policies. Depending on the distance between schools, it might be

necessary to transport older students to the kindergarten classes. In these situations, the Program Facilitator coordinates students' release from school and their transportation to and from the program delivery site, or provides transportation for them. The logistics are somewhat easier for homeschooled students serving as Program Volunteers. *Utilizing older elementary school students attending school at the program delivery site would eliminate many of the scheduling and transportation issues.*

A Sample Letter to School Administrator Requesting Leave Time for Youth Program Volunteers is included (C.2.c.).

Engaging adult volunteers to deliver the **BBB** is also an option. However, this eliminates one of the program's target audiences, older youth, and may require modification of the osteoporosis training materials for adult audiences.

Program Volunteer Recognition

Three different styles of Program Volunteer Appreciation Certificates (C.2.m. and Certificates 1 and 2) are on pages 74-76. These certificates can be presented to the Program Volunteers during the end-of-the year celebration or other recognition events. One certificate version can be personalized and printed using a color printer. The other two are designed to be printed onto certificates or pre-printed paper with borders.

Strong Bones Bank (C.3.b. & E.3.)

The bone bank reinforces the concept that the children's bodies are bone banks and they should "make deposits" to build strong bones as they grow for use or withdrawal, when they are older.

"Banks" are necessary components of both the **BBB** Teaching Kit and the Supplemental Teacher Kit. Program Volunteers display and interact with the bank during their presentation to the kindergarteners, and banks are left with the teachers to allow them to continue the concept afterwards.

Coins are an essential part of the bone bank. Coins display graphic images related to the core program concepts of eating calcium-rich foods, engaging in regular physical activity, and safely acquiring vitamin D. When a child eats

Strong Bones Banks

- Each Kindergarten Teaching Kit and Supplemental Teacher Kit needs at least one bone bank.
- Banks can be made by Program Facilitators or by Program Volunteers as a part of their training.
- The number needed depends upon the number of classrooms visited and the number of kits developed.
- How to Make a Strong Bones Bank (C.3.b.) contains detailed instructions for making bone banks.

calcium-rich foods, engages in physical activity, or attains vitamin D, teachers (and parents) are encouraged to have them deposit the appropriate coins into a “Strong Bones Bank.”

Calcium Coins: Dairy products are a good source of calcium. But there are other good food sources of calcium. Two coin graphics are provided; one contains images of dairy products, the other contains text: 1 serving of dairy. The 1-serving of dairy coin can be used if dairy products or other non-dairy calcium-rich foods such as fish with bones, figs, green leafy vegetables (kale or turnip greens) and broccoli are consumed.

Vitamin D Coins: Vitamin D can be obtained from food, exposure to sunlight, and supplements. Due to the risk of skin cancer, children should wear sunscreen to protect their skin from the sun’s rays. You can encourage them to get vitamin D from foods such as egg yolks and fortified dairy products. The vitamin D coins can be used to reinforce both the consumption of vitamin D foods and limited exposure to sunshine. Children need to “earn” at least one vitamin D coin a day.

Activity Coins: Children are encouraged to have a total of 60 minutes of activity daily. Weight bearing activities such as running, jumping rope, skipping, and hopping are especially good for bone builders. Activity coins are made to represent a variety of play and 15, 30, and 60 minutes of physical activity.

Reduce the Risk for Skin Cancer

- Prolonged exposure to the sun’s rays can damage skin and is known to cause skin cancer. To reduce this risk, children should spend limited amounts of time outside in the sunlight without sunscreen.

Teacher Evaluations

Including the Teacher Evaluation Form (C.4.c.) with a thank-you note (C.2.f.) and a self-addressed stamped envelope or sending an email informing teachers of when you will personally visit them to pick up their completed evaluation form are ways to encourage teachers to complete their evaluation forms and get them to you. If funds allow, you may mention that you will provide them with a small gift that would be appropriate to the osteoporosis focus (your decision and choice).

Why Did My Bone Break?

The 4-H TiLT youth volunteers selected the children’s book *Why Did My Bone Break?* to read to the kindergarteners. It is a 9”x8” paperback book containing 32 pages. The book tells a story about a young boy named Pedro who breaks his arm while playing at school. He goes to a doctor who puts a cast on his broken arm to hold it in place until it heals. It’s important to note that Pedro broke his arm

because he fell, not because he had osteoporosis. The story talks about the difference between a child breaking his or her bones and an older person breaking their bones. Regardless of age, everyone needs to take care of their bones.

Why Did My Bones Break? is recommended for children from preschool to third grade. It has bright, colorful illustrations that support the text. A package including multiple books, an audio CD featuring a read-along and a sing-along track, a teacher's guide with integrated curriculum activities for math, art, and music, and related family activities for home is available. A Spanish version of the book and CD is also available. Refer to Recommended Resources (C.3.a.).

You may want to consider using the dance on the CD for the dancing portion of the **BBB** lesson.

Permission has been granted by the publisher to use this book and the teacher's guide in this program for educational purposes.

B.1.d. TARGET AUDIENCES

- **Kindergarten students** are taught in classroom settings by Program Volunteers. The younger students easily relate to the older youth, look to them as role models, and enjoy learning about bone health and applying the subject matter taught by the older youth.
- **Program Volunteers** learn about osteoporosis and bone health and how to teach **BBB** to kindergarteners. Because 90% of a person's peak bone mass is achieved by the time a person is 20 years old, early and late adolescence are key times to be establish a healthy lifestyle and develop habits for a lifetime. But anytime is a good time to focus on bone health so a person of any age could be a volunteer.
- **Parents of kindergarten students** are provided with take-home packets that include information on how to develop healthy bones and some family activities. Parents of kindergarteners are generally at the age where they can still build bone mass. The purpose of the take-home packets is to encourage the parents to develop a healthy bone lifestyle for themselves and their children.
- **Teachers of kindergarten students** are key to continuing the effort through reinforcing the bone health materials and messages presented by the Program Volunteers in the classroom. Additional teaching materials are offered to teachers to provide continued support for classroom activities. Regardless of their age and stage of life, teachers can benefit from the information and from acquiring bone building habits.

B.1.e. SPECIFIC LEARNING OBJECTIVES BY TARGET AUDIENCE As

a result of participating in the **BBB** program:

Kindergarteners will be able to:

- Identify foods that provide calcium
- Indicate that there are other foods besides dairy that contain calcium
- Indicate how many servings of calcium they need every day
- Identify sources of vitamin D
- Identify how many minutes of exercise are needed every day

Program Volunteers will be able to:

- Define osteoporosis and related risk factors
- Explain how a person may be able to reduce their risk of getting osteoporosis
- Identify food sources of calcium
- Identify safe sources of vitamin D
- Identify what types of exercises have bone building benefits
- Teach the **BBB** lesson to kindergarten classes
- Correctly answer questions from the kindergarteners

Parents will become aware of:

- The **BBB** program at their child's school
- Bone-building activities they can do with their family
- The need for calcium and safely accruing vitamin D for good health and bone development

Teachers will improve their knowledge and awareness of:

- Osteoporosis and related risk factors
- Safe sources of vitamin D
- Calcium-rich foods
- Types of exercise that prevent osteoporosis or build strong bones

B.1.f. SPECIFIC BEHAVIORAL OBJECTIVES BY TARGET

AUDIENCE Program Volunteers will:

Indicate planned behavior change for increasing:

- Physical activity
- Consumption of calcium-rich foods
- Safe attainment of vitamin D

Kindergarteners will:

Indicate behavior change by:

- Putting their “coins” in the “Strong Bones Bank” for eating more calcium-rich food, exercising more, and/or safely getting more vitamin D

Teachers will:

- Report a personal behavior change by (or intentions to make a positive behavior change for) increasing:
 - Physical activity
 - Consumption of calcium-rich foods
 - Safe attainment of vitamin D
- Indicate a professional behavior change by reporting increasing:
 - Time spent in the classroom focused on bone health
 - Information and activities related to bone health in their curriculum

B.2. Program Timeline: September-June

*Try to set a schedule that allows you to deliver the **BBB** lesson during May to highlight National Osteoporosis and Awareness Month.*

September-November

- Review **BBB** materials.
- Become familiar with osteoporosis and bone health.
- Determine cost using **BBB** Budget Worksheet (B.3.).
- Seek funding for volunteer training, supplies, and teaching kits.
- Contact administrators and/or teachers at elementary schools (C.2.b.), nursery schools, day care centers, or other potential locations for reaching young children with the program to introduce it. Follow-up to obtain commitment and set dates for lesson delivery in May.

December

- Secure program funding.
- Develop your plan for training Program Volunteers.
- Recruit a Program Facilitator or hire one if necessary.
- Recruit Program Volunteers.
- Schedule training for volunteers.
- Purchase supplies and assemble teaching materials for Program Volunteer training.

January

- Begin the training of Program Volunteers.
- Obtain supplies/materials for Program Volunteer Teaching Kit (E.2.a.), Teacher Supplemental Kits (F.3.), Teacher Handouts (F.4.), and Parent Packets (F.5).

February

- Continue program volunteer training as needed—practice “teaching” lesson using script.
- Administer pre-test/post-test evaluation (C.4.a.) to Program Volunteers at the completion of their training.

March

- Assemble supplies and donations for Program Volunteer Teaching Kit (E.2.a.), Supplemental Teacher Kits (F.3.), and Parent Packets (F.5.).
- Make resource CDs for teachers (F.4.).

- Contact school administrators and/or teachers to confirm dates for **BBB** classroom visits in May (C.2.d.).

April

- Arrange release-time for youth volunteers to teach younger students, if necessary (C.2.c.)
- Arrange transportation for Program Volunteers to get to program deliver sites and schools, if necessary.
- Send or deliver Kindergartener Pre-test/Post-test (C.4.b) instrument to kindergarten teachers. Include Confirmation Letter to Teacher-Before the **BBB** Lesson (C.2.d.) which contains instructions for administering the test. Include pre-tests/post-tests (C.4.b.) and a Classroom Activities handout (C.3.k.).
- Inquire about the need for a photo release to take photos and videos (*optional*).
- Provide a customized Photo Release (C.2.a.) with instructions, if necessary.
- Submit Press Release-Before the **BBB** Lesson (C.2.i.) to promote National Osteoporosis Awareness and Prevention Month and the **BBB** program.

May

- **Before Lesson**

- One to two weeks prior to your visit, contact classroom teachers to confirm date and time of **BBB** lesson.
- Highlight National Osteoporosis Awareness and Prevention Month

- **The Day of the Lesson**

- **BBB** Program Volunteers teach **BBB** lesson to kindergarten students.
- Take photos for media (*optional*).
- Provide teachers with Teacher Supplemental Kits (F.3.).
- Encourage teachers to continue to use supplemental materials in their classrooms.
- Provide teachers with the post-test evaluation packet and CD (F.4.) and Instructions to Teacher-After the **BBB** Lesson (C.2.e.) with instructions.
- Give teacher/s calcium-rich snacks for students and take-home Parent Packets (F.5.).

- **After the Lesson**

- Complete the End-of-Program Record (C.2.n.) with the assistance of Program Volunteers.
- Send Thank You Note to Teacher-1 Week Post **BBB** Lesson (C.2.f.).

- Send Letter to Teacher with Teacher Evaluation (C.4.g.) and Teacher Evaluation (C.4.c.).
- Collect loaned Supplemental Teacher Kits and post-tests approximately 4 weeks after the **BBB** lesson. Pick up evaluations, if they have not been received by mail.
- Present teachers with gifts, if applicable.

June

- Evaluate program success and complete End-of-Program Record (C.2.n.):
 - Tabulate pre-tests and post-tests results and compare.
 - Summarize teacher feedback.
 - Add notes.
- Submit Press Release-After the **BBB** Lesson (C.2.j.) with photos to media outlets.
- Provide formal recognition of Program Volunteers by presenting them with certificates (C.2.m.) and/or hosting a celebration. Consider inviting school administrators and classroom teachers. Be sure to serve calcium-rich foods!

B.3. Budget Planning Worksheet

This worksheet is provided to assist you in determining the amount of funds needed to conduct the **BBB** program.

Some supplies need to be purchased, others can be acquired free of charge. You may have some items. Others you may choose to make. Decide in advance the number of kits needed. If the goal is to visit more than one school during a several week period, one Program Volunteer Teaching Kit (E.2.a.) and Teacher Supplemental Kit (F.3.) will be needed for each school. The calcium-rich snack for the kindergarteners is a key component of the program, but it is also costly and can be omitted. The Parent Packet (F.5.) is a way to get the information to an additional audience and continue what was taught in the classroom to the home. Items in kits are only suggestions and kits can be customized.

Note: The salary or consulting fee for the Program Facilitator is not included in this budget. Incidental printing and/or copy machine costs and postage are not included. Also, it is also assumed that the Program Facilitator has access to computers, the internet, and a projector.

I. Program Volunteer Training

- ✓ **BBB** Program Volunteer Teaching Kit _____
- ✓ Calcium-rich food samples _____
(e.g., ice cream cup, string cheese, yogurt tube) (optional)
- ✓ Materials to make “Strong Bones Banks” _____

II. **BBB** Lesson Kit

Refer to Recommended Resources (C.3.a.) for suggestions.

- ✓ Music CD (or downloaded file) _____
- ✓ Strong Bone Banks _____
- ✓ MyPlate poster, plate, or display _____
- ✓ Bone models/replicas _____
- ✓ Objects to represent exercise _____
- ✓ Children’s book—*Why Did My Bone Break?* _____
- ✓ Food models of calcium-rich foods _____
- ✓ Food labels showing vitamin D fortified foods (such as milk, Yogurt, cheese and breakfast cereals) _____
- ✓ Magnetic or felt board _____
- ✓ Printing for marketing and handouts _____
- ✓ Container to hold supplies for kit _____
- ✓ Calcium-rich food samples (optional) _____
(e.g., low-fat, lower sugar ice cream or frozen yogurt cup; string cheese; low-fat, lower sugar yogurt tube)
- ✓ Transportation/travel _____

- ✓ T-shirts (optional) _____
- ✓ Advertising/marketing _____
- ✓ Device to play music for dance _____

III. Parent Packets

Many items can be obtained free of charge

- ✓ Bags or envelopes _____
- ✓ Printing for handouts _____

IV. Teacher Supplemental Kit

- ✓ CD _____
- ✓ (2) Skeleton floor puzzles _____
- ✓ "Strong Bones Bank" _____
- ✓ Container to hold items in kit _____
- ✓ Printing (e.g. handouts and CD labels) _____
- ✓ Envelopes _____
- ✓ Stamps _____
- ✓ Children's books:

Milk Comes from a Cow _____

From Cow to Carton _____

Extra Cheese, Please! Mozzarella's Journey from Cow to Pizza _____

Fairy in the Dairy _____

V. Teacher Gift

- ✓ Your choice (optional gift for each teacher) _____

TOTAL \$ _____

C. Program Resources

C.1. Logo Sheet

Electronic files of the **Be a Bone Builder** logo are available in the attached files.

