



Powerful Bones.  
Powerful Girls.

THE NATIONAL BONE HEALTH CAMPAIGN™

[www.cdc.gov/powerfulbones](http://www.cdc.gov/powerfulbones)



# Communicating with Girls and Parents about Bone Health

## OVERALL STRATEGIES

Quantitative and qualitative research for The National Bone Health Campaign suggests that campaigns targeting young girls (aged 9-12) and their parents about calcium consumption and weight-bearing physical activity should include certain components. It is helpful to keep these in mind when developing your messages:

**Information.** Young girls and their parents associate good nutrition with good health, and most understand that calcium is important for building strong bones. However, many girls and their parents are unaware of how much calcium pre-teen girls need daily for optimal bone development. Further, girls and their parents generally do not know that physical activity is also needed for bone development. Thus, raising knowledge about bone health and bone-healthy behaviors is the first step in increasing these behaviors among girls.

**Motivation.** Parents are motivated to take actions that will keep their daughters healthy. To most girls, osteoporosis is a health threat so far in the future that it has little motivational power now. However, they are attracted to benefits of healthy behaviors, such as energy, confidence, good looks, having fun, eating good tasting food, and strength; campaigns can promote healthy behaviors by appealing to these values. Healthy eating and physical activity can also be positioned as ways to express one's individuality.

**Action Steps.** Campaign recommendations should be presented as simple actions that girls can understand and attempt. For example, messages about calcium consumption should be framed in terms of eating specific foods and should provide information about serving size. Messages to promote weight-bearing physical activity should provide information on types of activities and suggestions to make it sound fun. Messages should take barriers into account—such as positioning behaviors as something that can easily fit into daily life.

**Environmental Facilitation.** Creating an environment that makes it easy for target audience members to take the recommended actions can help greatly as the audience moves from attitude change to behavior change. Thus, whenever feasible, campaigns should work to ensure girls' homes, schools, and communities enable them to have access to foods with calcium and opportunities to be physically active.

*See the following pages for Message Considerations for Girls (Aged 9-12) and Parents.*

Powerful Bones. Powerful Girls.  
THE NATIONAL BONE HEALTH CAMPAIGN™

# Message Considerations for Girls (Aged 9-12)

## MESSAGES ABOUT CALCIUM CONSUMPTION

KNOWLEDGE	POSSIBLE APPLICATIONS
<p>Girls and their parents <b>may not know</b> which foods have calcium or how much calcium they need. Some may also not realize the importance of calcium.</p>	<p>Mention the <i>Powerful Bones. Powerful Girls.</i>™ Web site <a href="http://www.cdc.gov/powerfulbones/">http://www.cdc.gov/powerfulbones/</a> in materials for kid-friendly information, calcium ideas, and educational games.</p> <p>Reinforce the fact that girls need 1,300 milligrams (130% Daily Value) of calcium each day, and how that translates into food selection and serving size.</p> <p>Emphasize the importance of a balanced diet, including calcium, and why it's important to build strong bones.</p>
<p><b>Taste and convenience</b> (time constraints) are the most important factors in young girls' food choices.</p>	<p>Encourage parents to facilitate their daughters' consumption of foods with calcium by serving a greater variety of foods and snacks with calcium, including calcium-fortified versions of foods that girls commonly eat (such as orange juice and breakfast cereal).</p> <p>Suggest ways to select foods with calcium while away from home or on the go. Encourage parents to incorporate dairy and non-dairy foods with calcium into their family's meals and snacks (such as packing foods with calcium in lunches).</p>
<p>Making tasty foods with calcium <b>easily available</b> to girls can enhance their calcium consumption.</p> <p>Girls make most of their <b>food choices</b> at home and school, although, as they grow older, they begin to patronize fast-food restaurants more frequently.</p>	<p>Increase availability and accessibility of attractive foods with calcium in homes, schools, and fast-food restaurants to make it easier for girls to incorporate these foods in their diet. For example, encourage schools to serve fortified orange juice and more varieties of flavored low-fat milk and yogurt (these products are more attractive to girls when served well chilled).</p>
<p><b>Peer influences and the image of foods</b> (e.g., "fun" foods) may also play a role in girls' food choices, particularly as they grow older. Some girls may not perceive foods with calcium as "tasty" or "cool."</p>	<p>With meal and snack suggestions, incorporate foods with calcium into dishes that girls already like.</p> <p>Support milk consumption, for example, among girls by countering perceptions that milk is childish and "not cool," so that it is "OK" for girls to select this beverage when eating with friends.</p>
<p>Milk is the major source of calcium for most young children, but <b>milk consumption declines</b> as girls move into their pre-teen and teenage years.</p>	<p>Focus on a range of sources and preparations to increase consumption, particularly for girls who dislike the taste of milk or who are lactose intolerant. Encourage eating more foods that girls already like and eat (such as smoothies, fat-free or low-fat chocolate milk, and low-fat cheese), as well as non-dairy foods.</p>
<p>Another factor that influences girls' food choices is <b>habit</b>, as opposed to making conscious decisions or plans about their diet. Girls tend to eat often, routinely supplementing their meals with snacks. They tend to have very regular and limited diets, composed of a few foods that they enjoy, and do not give much thought to their meals on a daily basis.</p>	<p>Incorporate foods with calcium into girls' daily routines, for example, through a daily breakfast or snack with calcium.</p> <p>Encourage parents to make grocery lists or shop with their daughter, to learn about food choices and meal planning.</p>
<p>Older girls' <b>food choices are also influenced</b> by weight concerns, as are many parents' choices.</p>	<p>Promote tasty preparations of low-fat foods with calcium and emphasize that these foods are both tasty and nutritious.</p>

## Message Considerations for Girls (Aged 9-12)

### MESSAGES ABOUT PHYSICAL ACTIVITY

KNOWLEDGE	POSSIBLE APPLICATIONS
<p>Girls already <b>believe that physical activity has benefits</b> such as increased strength, energy, confidence, skill mastery, social interaction, and fun. However, girls' <b>activity levels drop</b> off as they enter their teens.</p>	<p>Encourage girls to adopt physical activity, especially weight-bearing, as a life-long habit or a lifestyle that may help them remain active throughout life. Reinforce the perceived benefits of physical activity—strength, energy, confidence, a healthy body, and a chance to socialize and have fun.</p> <p>Girls who do stick with physical activity tend to be more interested in team sports, so encourage girls to sign up for a popular activity such as soccer or basketball, or a class such as tae kwon do.</p>
<p>It is especially challenging, and especially important, to <b>reach girls who are not currently involved</b> in regular team sports or who may lack the opportunity to participate.</p>	<p>Messages that promote different ways to be active, both within and outside of organized sports, may be more relevant for these girls. Promoting a variety of activities that range in cost also makes it easier for girls to choose activities that suit their lifestyles and interests.</p>
<p>Most young <b>girls believe they are active enough</b>.</p>	<p>Messages need to be clear about the frequency and type of weight-bearing physical activity necessary to build strong bones.</p>
<p><b>Lack of skills and confidence</b> is a significant barrier to physical activity among girls of this age group.</p>	<p>To persuade girls to try and maintain activity, encourage them to set flexible goals starting with easy activities that give them a sense of mastery and skill, and then build up to harder activities.</p>
<p>Girls are more likely to take up activities that they can <b>do with their friends</b>.</p>	<p>Promote activities as ways to have fun with friends. For instance, encourage girls to take walks with friends instead of chatting with them on the phone or the computer.</p>
<p>Factors that determine girls' opportunities to participate in physical activities are at least as important as the personal factors described above (e.g., lack of skills and confidence). Among the main <b>barriers to physical activity</b> cited by young girls are cost, lack of transportation, not having a safe and convenient place to be active, and not having friends to share the activity.</p>	<p>Introduce girls to weight-bearing activities that they can do by themselves, like jumping rope, dancing, or hopscotch – or activities that they can do with others.</p> <p>Promote expansion of school and community programs to increase girls' access to sports or other physical activities for facilitating changes in their activity levels. Also, parental support for these activities is critical to girls' participation.</p>
<p>Some girls <b>may not be physically able</b> to participate in weight-bearing physical activity.</p>	<p>Suggest resistance activities if girls cannot participate in weight-bearing physical activity. Examples include using resistance bands and weight training. For the latter, a doctor would need to suggest an appropriate program.</p>

## Message Considerations for Parents

Messages that position bone-healthy behaviors as part of girls' overall health and well-being now and for life are likely to be well received by parents. For example, calcium consumption should be positioned in the context of overall nutrition. To that end, concerns about the high fat content of some dairy products should be addressed.

Messages should show parents how their daughters can meet their calcium and weight-bearing physical activity requirements and should give them practical information to facilitate these behavior changes. Messages that focus on simple ways to promote bone-healthy behaviors in girls enhance the likelihood that parents will try these actions. Every effective action can give parents a sense of satisfaction and enhance parents' self-confidence, thus reinforcing maintenance of that behavior and encouraging them to introduce other bone-healthy behaviors.

Messages should highlight all the ways in which parents can promote healthy behaviors among their daughters. These include:

- **Facilitating healthy behaviors by influencing their children's physical environment.** Parents can enhance their daughters' calcium consumption by purchasing, preparing, and serving more foods, beverages, and snacks with calcium, and by limiting their access to competitor foods and beverages. They can enhance their children's physical activity by increasing children's access to parks, community recreation centers, and sports groups and teams, and by limiting sedentary activities such as watching television.
- **Reinforcing the importance of bone-healthy behaviors.** Parents' opinions, advice, and discussions can educate young girls about bone-healthy behaviors and are likely to affect girls' attitudes and behaviors. The research suggests that parents' opinions are important to pre-teen and teenaged children, despite competing influences from peers and the media.
- **Modeling healthy behaviors.** Modeling healthy behaviors is more effective than telling children to practice them. Modeling is especially effective in helping engender lifelong healthy habits in children.
- **Encouraging and reinforcing healthy behaviors.** Children respond well to parental praise, rewards, and involvement. Parents can also encourage healthy behaviors by making desired rewards and treats contingent on performance of these behaviors.

Messages should avoid sounding "preachy" or judgmental by acknowledging parents' desire to do the best for their children and by positioning the target behaviors as part of this effort.

---

The National Bone Health Campaign is a multi-year national campaign to promote optimal bone health in girls 9-12 years old, and thus reduce their risk of osteoporosis later in life. The goal is to educate and encourage girls to establish lifelong healthy habits, especially increased calcium consumption and weight-bearing physical activity, to build and maintain strong bones.



**Powerful Bones. Powerful Girls.**  
THE NATIONAL BONE HEALTH CAMPAIGN™