

## NR-000-18, CCNE: Building Strong Blood

A client-centered approach to nutrition education uses methods like group discussions and hands-on activities to engage participants in learning. This outline starts with a **Snapshot of the Session**, and then includes two parts:

**Part 1: Planning the Nutrition Education Session** - The first section prompts the nutrition educator to think about the learning objectives, materials, and preparation necessary to carry out the session.

**Part 2: Session Outline** - The second section outlines the key parts of the session. The nutrition educator uses this outline to lead the session.

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### Snapshot of Group Session:

**CCNE Lesson title:** Building “Strong Blood”

**Developed by:** University of Texas at Austin & State WIC NE Staff

**Date Developed:** 1/2011

**Approved by:** State WIC NE Staff

**NE Code:** NR-000-18

**Class Description:** This lesson uses bingo board handouts and facilitated group discussion to explore the importance of iron in the diet. Using the bingo board handouts, participants will identify iron-rich and vitamin C-rich foods that they have eaten in the past three days and talk about ideas for combining these foods. Participants will also explore how overconsumption of milk, as well as drinking tea and coffee during meals can interfere with meeting iron needs.

**Target Audience:** Parents and Children, General.

**Type of Learning Activities:** Facilitated discussion, hands on activity

## Part 1: Planning the Nutrition Education Session

Lesson: NR-000-18, Building Strong Blood

Item	Notes for Planning the Session
<p><b>Learning Objective(s)</b> – <i>What will the clients gain from the class?</i></p>	<p>By the end of the session, participants will:</p> <ul style="list-style-type: none"><li>• Understand that eating iron rich foods will help build “strong blood”.</li><li>• Identify the role of vitamin C in iron absorption.</li><li>• Recognize that drinking too much milk, and drinking tea and coffee during mealtimes can interfere with meeting iron needs.</li><li>• Share ideas for increasing iron and vitamin C foods and food combinations.</li></ul>
<p><b>Key Content Points</b> – <i>What key information do the learners need to know to achieve the learning objective(s)? Aim for three main points.</i></p>	<ol style="list-style-type: none"><li>1. Building “strong blood” by eating high iron foods will help both you and your children live healthy, happy and active lives.</li><li>2. To better absorb iron and build “strong blood”, combine iron-rich foods with vitamin C rich foods.</li><li>3. Drinking beverages such as tea and coffee can interfere with iron absorption and drinking too much milk can keep kids from eating other high iron foods.</li></ol>
<p><b>Materials</b> – <i>List what you will need for the session (i.e. visual aids, handouts, supplies). Attach supplemental materials.</i></p>	<ul style="list-style-type: none"><li>• “Building Strong Blood” activity handout</li><li>• Pencils or pens</li><li>• Optional<ul style="list-style-type: none"><li>○ Flip chart or whiteboard &amp; markers</li><li>○ “Prevent Anemia with Iron-Rich Foods” WIC Handout stock no. 13-67</li><li>○ Your Guide to WIC Foods stock # 13-06-13178 (Have copies available for optional activity)</li></ul></li></ul>
<p><b>Resources</b> – <i>Review current WIC resources or other reliable resources like WIC Works.</i></p>	<p>Nutrition Fact Sheet on Iron Deficiency which can be downloaded from: <a href="http://www.dshs.state.tx.us/wichd/nut/pdf/fac11-s.pdf">http://www.dshs.state.tx.us/wichd/nut/pdf/fac11-s.pdf</a></p> <p>Read the “Iron for Strong Blood” handout at: <a href="http://www.nal.usda.gov/wicworks/Sharing_Center/WA/wiciron.pdf">http://www.nal.usda.gov/wicworks/Sharing_Center/WA/wiciron.pdf</a></p>

<p><b>Class Flow &amp; Set Up –</b>  <i>Consider the flow of the session &amp; room set-up. Note any extra preparation that may be needed.</i></p>	<p>Arrange chairs in a circle or semi-circle. Leave room for baby carriers and strollers</p> <p>Optional: set up whiteboard or flip-chart for use with group brainstorming, and to record key points during session.</p> <p>Several sample discussion questions are provided for each activity.</p>
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## Part 2: Session Outline

**Lesson:** NR-000-18, Building Strong Blood

Item	Notes for Conducting the Session
<p><b>Introduction:</b> <i>Create a respectful and accepting learning environment by welcoming participants, introducing yourself, reviewing agenda exploring ground rules, making announcements, etc.</i></p>	<p>Example: <i>Welcome, thank you for coming. My name is _____. Today we are going to discuss the importance of iron for building “strong blood”. Many of us have heard of building strong bones, or building strong muscles, but building “strong blood” is also very important. “Strong blood” helps give us the energy we need for daily activities and helps keep us feeling our best.</i></p>
<p><b>Icebreaker:</b> <i>Anchor the topic to the participants’ lives. Use a question or activity likely to bring out positive but brief comments; Can be done as a group or partners.</i></p>	<p>Ask participants to share their name, the names of their children, and an activity that they or their children like to do.</p> <p>Explain the connection between low iron and low energy levels.</p> <p>Example: <i>“If iron levels are low, you or your children can feel tired and not have the energy to do the activities that you love. Today’s lesson, will give you some ideas for ways to get more iron in your diet so you and your family can stay healthy, happy, and strong.”</i></p>
<p><b>Activities:</b> <i>For each learning activity, list instructions and include three to five open-ended discussion questions. Keep in mind that activities should enable participants to meet the learning objectives.</i></p>	<p><b><u>Iron &amp; Vitamin C Bingo</u></b></p> <p>Provide handout “Building Strong Blood”.</p> <p>Explain that there are two bingo boards on the page. Ask participants to circle foods on both bingo boards that they have eaten in the past three days. If they have 4 foods circled in a row, either horizontally or vertically then they have a “bingo”. Allow time for participants to look over handout and circle foods.</p> <ul style="list-style-type: none"> <li>• <b>Who got a bingo on the first bingo board? What foods did you circle?</b></li> </ul>

Item	Notes for Conducting the Session
	<ul style="list-style-type: none"> <li>• <b>What do all of these foods have in common?</b> <ul style="list-style-type: none"> <li>○ [They are good sources of iron.]</li> </ul> </li> </ul> <p>Have participants write “iron” at the top of the bingo board.</p> <ul style="list-style-type: none"> <li>• <b>Looking at these iron rich foods, what foods do you think you or your child could try to eat more of?</b></li> <li>• <b>What ideas do you have for eating more foods high in iron?</b> <ul style="list-style-type: none"> <li>○ [Example: put iron fortified cereal into snack bags and use as a snack on the go.]</li> </ul> </li> <li>• <b>How can having low iron affect our bodies?</b> <ul style="list-style-type: none"> <li>○ [Can make us feel tired and weak, look pale, get sick more easily and keep us from being able to do the activities that we enjoy. Children may not grow well and can have trouble learning.]</li> </ul> </li> <li>• <b>Who got a bingo on the second bingo board? What foods did you circle?</b></li> <li>• <b>What do these foods have in common?</b> <ul style="list-style-type: none"> <li>○ [They are high in vitamin C.]</li> </ul> </li> </ul> <p>Have participants write vitamin C at the top of the bingo board.</p> <ul style="list-style-type: none"> <li>• <b>What have you heard about iron and vitamin C working together?</b> <ul style="list-style-type: none"> <li>○ [Vitamin C helps the body absorb iron. Eat vitamin C and iron foods together in the same meal.]</li> </ul> </li> <li>• <b>Looking at these two bingo boards, what are some high iron and high vitamin C combinations that you can think of?</b> <ul style="list-style-type: none"> <li>○ [Beans and tomatoes, tofu and broccoli, tomatoes and peppers, salsa on taco, orange juice with meal, fruit with cereal.]</li> </ul> </li> <li>• <b>What are some combinations that you’ve tried or might want to try?</b></li> <li>• <b>What do you think your child might be willing to try?</b></li> </ul> <p>Have participants write food combination ideas at the bottom of the handout.</p> <p><b><u>Iron &amp; Beverages</u></b></p> <p>Point out to participants that milk is not on either of the bingo boards. Drinking too much milk as well as drinking coffee and tea during mealtimes can keep us and our children from getting enough iron.</p>

Item	Notes for Conducting the Session
	<ul style="list-style-type: none"> <li>• <b>Why do you think drinking too much milk can keep us and our children from getting enough iron?</b> <ul style="list-style-type: none"> <li>○ [Milk is high in calcium so it is good for building strong bones and teeth but it is not a good source of iron. Too much milk can fill children up and keep them from enough high iron foods.]</li> </ul> </li> <li>• <b>Why can drinking coffee and tea during mealtimes also keep us and our children from getting enough iron?</b> <ul style="list-style-type: none"> <li>○ [Drinking tea and coffee during mealtimes can keep your body from being able to use the iron in foods. Tea and coffee contain tannins which bind to iron and decrease absorption. Even decaffeinated tea and coffee contain tannins and can interfere with iron absorption.]</li> </ul> </li> <li>• <b>What do you think is the recommended amount of milk for children ages 1-5?</b> <ul style="list-style-type: none"> <li>○ [Limit milk consumption to 2 cups (16oz) per day for ages 1-5.]</li> </ul> </li> <li>• <b>What have you done/ideas do you have to try to limit the amount of milk your child drinks?</b> <ul style="list-style-type: none"> <li>○ [Example: stop bottle use at 1 year.]</li> </ul> </li> </ul> <p><b><u>Optional Activity: WIC Recipes</u></b></p> <p>Have participants, in pairs, look through “Your Guide to WIC Foods” recipes.</p> <ul style="list-style-type: none"> <li>• <b>Which recipes are a good combination of iron and vitamin C foods and why?</b> <ul style="list-style-type: none"> <li>○ [Vegetable Stir-fry, Texas chili, Quick Black Bean Quesadillas, Spanish Brown Rice.]</li> </ul> </li> </ul>

Item	Notes for Conducting the Session
<p><b>Review and Evaluations:</b>  <i>Invite participants to summarize the key points and share how they will use what they learned in the future. List a question/activity to prompt this. List any community or other resources for clients.</i></p>	<p><b>Why is it important for us to build “strong blood”?</b></p> <p><b>Of all the things we’ve talked about today, what’s something you want to try in order to help you and your child build “strong blood”?</b></p>

Item	Notes for Conducting the Session
<p><b>Personal Review of Session (afterward):</b> Take a few moments to evaluate the class. What will you change?</p>	<p><b>What went well?</b></p> <p><b>What did not go as well?</b></p> <p><b>What will you do the same way the next time you give this class?</b></p>
<p><b>Supplemental Information –</b> Describe any attachments and include any other needed information.</p>	<p><b>Iron Recommendations:</b></p> <p>Infants and children</p> <ul style="list-style-type: none"> <li>• Younger than 6 months: 0.27 milligrams per day (mg/day)</li> <li>• 7 months to 1 year: 11 mg/day</li> <li>• 1 to 3 years: 7 mg/day</li> <li>• 4 to 8 years: 10 mg/day</li> </ul> <p>Males</p> <ul style="list-style-type: none"> <li>• 9 to 13 years: 8 mg/day</li> <li>• 14 to 18 years: 11 mg/day</li> <li>• Age 19 and older: 8 mg/day</li> </ul> <p>Females</p> <ul style="list-style-type: none"> <li>• 9 to 13 years: 8 mg/day</li> <li>• 14 to 18 years: 15 mg/day</li> <li>• 19 to 50 years: 18 mg/day</li> <li>• 51 and older: 8 mg/day</li> </ul> <p>[ Iron in Diet: <a href="http://www.nlm.nih.gov/">http://www.nlm.nih.gov/</a> ]</p> <p><b>Sources of Iron:</b></p> <p>Ready to eat Cereal, 100% iron fortified, 1 cup = 18 mg (100% daily value)  Chicken liver, cooked, 3 ½ oz = 12.8 mg (70%)  Oatmeal, instant, fortified, 1 cup = 10 mg (60%)  Lentils, boiled, 1 cup = 6.6 mg (35%)  Tofu, raw, firm, ½ cup = 3.4 mg (20%)  Spinach, boiled, drained, ½ cup = 3.2 mg (20%)  Beans, pinto, 1 cup = 3.6 mg (20%)  Turkey, dark meat, roasted, 3 ½ oz = 2.3 mg (10%)  Spinach, <i>canned</i>, drained, ½ cup = 2.5 mg (10%)  Turkey, <i>light meat</i>, roasted, 3 ½ oz = 1.6 mg (8%)  Whole wheat bread, 1 slice = .9 mg (6%)  Tuna, fresh, cooked, dry heat, 3 oz = 1.1 mg (6%)  Chicken breast, roasted, 3 oz = 1.3 mg (6%)  Tuna, white, <i>canned in water</i>, 3 oz = .8 mg (4%)</p> <p>[Iron Fact Sheet: <a href="http://ods.od.nih.gov/">http://ods.od.nih.gov/</a> ]</p>

# BUILDING STRONG BLOOD

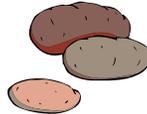
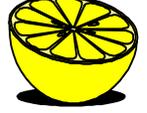
## Good Foods I Already Eat

These Foods Are Rich in: \_\_\_\_\_

<b>Beef</b> 	<b>Tofu</b> 	<b>WIC Cereal</b> 	<b>Peas</b> 
<b>Dried Fruit</b> 	<b>Chicken</b> 	<b>Enriched Rice</b> 	<b>Turkey</b> 
<b>Corn/Flour Tortillas</b> 	<b>Leafy Greens</b> 	<b>Beans</b> 	<b>Tuna</b> 
<b>Enriched Bread</b> 	<b>Enriched Pasta</b> 	<b>Fish</b> 	<b>Pork</b> 

## More Good Foods I Already Eat

These Foods are Rich in: \_\_\_\_\_

<b>Potato</b> 	<b>Tomato</b> 	<b>Cantaloupe</b> 	<b>Pineapple</b> 
<b>Papaya</b> 	<b>Chile Pepper</b> 	<b>Bell Pepper</b> 	<b>Kiwi</b> 
<b>Orange Juice</b> 	<b>Cabbage</b> 	<b>Grapefruit</b> 	<b>Mango</b> 
<b>Strawberries</b> 	<b>Orange</b> 	<b>Broccoli</b> 	<b>Cauliflower</b> 

## Food Combinations for Building Strong Blood:

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_