

Title: Build Your Body with Iron Lesson Plan for Interactive Nutrition Education Center

Target Audience: PG, BF, PP, C, I

Objectives: The client will:

1. Identify one or more sources of iron from foods
2. Choose one or more strategies to increase iron in their diets

Teaching Materials Needed, Including Handouts:

1. Components of the interactive display
2. Handout materials and feedback forms sufficient for all clients attending
3. Materials required for the chosen interactive components

Advance Preparation Needed:

1. Set up display area with materials for the interactive portion of the nutrition lesson
2. Copy all needed handouts for use with the lesson
3. Prepare the materials for the interactive activity chosen. You may wish to order the food model pictures from the Dairy Council for use with the display (see link under Comments).

Class Outline and Methods:

1. The interactive display and handouts will be available during clinic hours.
2. A knowledgeable staff member should be available for client questions regarding the interactive display. See background information on this topic below, under Concepts.
3. Offer the client handouts to reinforce the concepts on the display.
4. Once the client reads through the materials and completes the feedback form, the client should show the completed form to the delegated WIC staff person (e.g. clerk).
5. The delegated WIC staff person should ask the client if they have any questions. If yes, refer them to the staff person that can answer their questions.
6. The delegated WIC staff person should ask the client, "What is one thing you will try to do, based upon what you learned today?" For example, "What is one strategy you will try in the next month to add more iron into your family's meals?"
7. Upon completion of the lesson, a designated WIC staff person should record completion in the client's KWIC record. If the LA chooses, the client's goal can also be entered into KWIC.

Concepts and Key Points:

1. Iron is important for good health and growth.
2. Too little iron can lead to having pale or dry skin; feeling weak or tired; having shortness of breath, or loss of appetite.
3. Children with low iron levels may do poorly in school or learn more slowly.
4. Eating a wide variety of foods every day, including meat and other iron rich foods will help you get more iron.
5. Cutting down on "iron blockers" such as tea and coffee at meals can help the body absorb more iron.
6. Eating a Vitamin C rich food at the same meal as an iron rich food boosts the absorption of iron by the body. Try to have at least one iron/vitamin C combination meal each day.

7. Cooking in cast iron cookware can add iron to your food.
8. Infants receive most of their iron from breastmilk or iron-fortified formula.
9. Infant cereal is an excellent source of iron for infants 6 months or older.
10. WIC foods such as cereal, beans, eggs, and some fruits and vegetables can provide good sources of iron.

Interactive Component: Choose one or more of the following to incorporate with the display:

1. Use building blocks to demonstrate how reducing “iron blockers” and adding Vitamin C rich foods can boost iron stores. Place one of the hints on children’s building blocks and then use them to build a structure to go with the display.
2. Provide a “taste test” of an iron rich recipe to all who go through the display. Offer the “What’s Cooking” handout and recipes for them to take home and try.
3. Set up the display using model pictures from the Dairy Council representing meals that feature iron rich foods along with a Vitamin C source. You may wish to place special emphasis on meals and snacks enjoyed by young children. Have the client use the food models to make their own favorite food combinations.

Behavior Change Goal:

The designated staff person will assist the client/caregiver to set a goal based upon the interactive display as outlined in the methods section above.

Procedure for Clients to Ask Questions of Trained WIC Staff:

The designated WIC staff person will either answer the questions or guide the client to the staff person qualified to answer a question posed by the client/caregiver.

Evaluation:

The evaluation will consist of completing the feedback form attached and interacting with WIC staff as outlined in the Class Outline and Methods section above.

Comments/Other: To order food models, contact your local Dairy Council or the National Dairy Council. You may also use the link below to find food models: <http://school.fueluptoplay60.com/tools/nutrition-education/lessons.php>

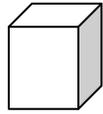
Lesson Plan Written By: Pat Dunavan, MS, RD, LD, 1993

Lesson Plan Revised By: Pat Dunavan, MS, RD, LD, 2013

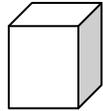
Lesson Plan Approved By:

Date:

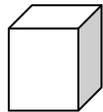
Build Your Body with Iron



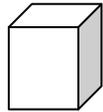
Cut down on "iron blockers like tea and coffee at meals



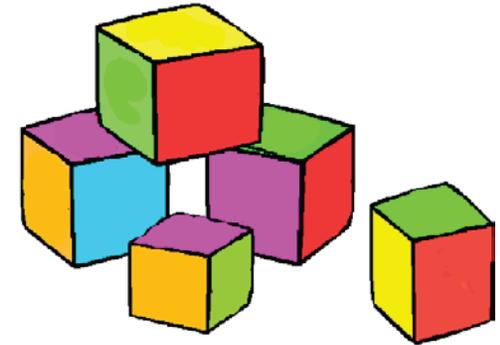
Use cast iron cookware to add more iron to your meals



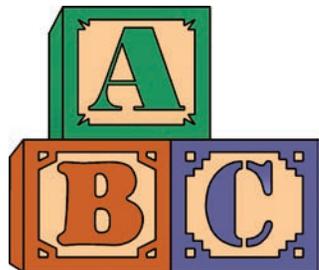
Include a Vitamin C rich food at meals with an iron rich food. Try a glass of juice with your morning cereal.



Eat a variety of foods each day. Add a little bit of meat to other foods.



Iron Rich Foods



Lean Meat	Eggs	Dried Beans and Peas	Nuts	Liver	Enriched Pasta	WIC cereals
Raisins	Prunes and prune juice	Greens	Broccoli	Spinach	Whole grain breads	
Peanut Butter	Dried apricots	Breastmilk	Infant Formula	Infant Cereal		

Sample Menu

A full day of high iron foods for you and your child

Breakfast



WIC cereal * with fruit* and milk*

Orange Juice* or other WIC Juice*

Whole Wheat Toast*

Snack



Crackers with peanut butter*

Fruit*

Lunch



Soft tacos* with beans* and meat

Dark Green Lettuce*

Tomatoes*

Milk*

Snack



Tuna Sandwich with Whole Wheat Bread*

Green Salad with Fresh Spinach Leaves*

Dinner



Chicken

Brown Rice*

Broccoli*

Fruit*

Milk *

*=WIC Foods



What's Cooking?

Seven Ways to Boost Your Iron



Make yourself strong and healthy by eating plenty of foods full of iron. Try one of the following ideas each day. Foods marked with an "*" are WIC foods.

1. Start your day with a high iron food

Bran Cereal Muffins

- | | |
|---------------------------|----------------------------|
| 1 cup bran cereal* | 1 can evaporated milk |
| 1 egg* | ¼ cup Cream of Wheat* |
| 2 teaspoons baking powder | ½ teaspoon cream of tartar |
| ¼ cup oil | ¼ cup molasses |
| 1 cup whole wheat flour | ¼ teaspoon baking soda |
| 1 cup raisins | |

Preheat oven to 400 degrees. Grease muffin pan. Mix cereal and milk in bowl. Let stand a minute or two. Add egg, oil, and molasses. Beat well. Blend remaining ingredients. Add to liquid and stir only until mixed. Put into muffin tins. Bake 20-25 minutes or until lightly browned. Makes 12 muffins.

2. Use your iron rich WIC beans once a week

Barbecued Black-eyed Peas

- | | |
|--------------------------------|---------------------------------|
| 2 cups cooked black-eyed peas* | 2 cups tomato puree* |
| ½ cup chopped onion* | 1 teaspoon Worcestershire sauce |
| 2 Tablespoons mustard | ¼ teaspoon garlic powder |
| Salt and pepper to taste | |

Combine all ingredients and place in a greased baking dish. Bake, uncovered, at 350 degrees for 45 minutes. Serves 2-4.

3. Make snacks that are full of iron

Yummy Bars

4 tablespoons margarine 40 large or 4 cups miniature marshmallows

¼ teaspoon nutmeg ¼ teaspoon cinnamon

1/3 cup peanut butter ½ cup chopped nuts

5 cups toasted oat ring cereal*

In a large saucepan, melt butter over low heat. Add marshmallows, spices, and peanut butter; stir until marshmallows are melted. Remove from heat; add nuts and cereal. Stir to coat all cereal. Spread into a buttered 9 inch square pan. Cool. Cut into squares. Make 24 bars. Try adding raisins or chopped dried apricots in place of nuts for a change.

4. Add more iron to your meals by using WIC cereals in a new way

Chicken Enchilada Casserole

4 corn tortillas* 4 cups cubed, cooked chicken

1 cup bran cereal* 1 cup shredded mozzarella cheese

1-10 ounce jar enchilada sauce 1-8 ounce can tomato sauce*

2/3 cup plain nonfat yogurt 4 cups shredded lettuce*

1/3 cup chopped onions* ½ cup chopped tomatoes*

Combine chicken, cereal, cheese, enchilada sauce and tomato sauce. Pour into baking dish. Bake at 350 degrees for 30 minutes. In the meantime, place tortillas on baking sheet. Bake at 350 degrees for 10 minutes or until crisp. Cool and break into small pieces. Set aside. Remove casserole from oven. Layer the yogurt, lettuce, onion, and tomatoes on top of casserole. Sprinkle with tortilla pieces. Serves 6.



5. Try a new bean soup, salad, or chili recipe today

Chili

1 pound red or pinto beans, soaked overnight*	1 onion, chopped*
½ teaspoon salt	½ pound ground beef
2 cups tomato juice or canned tomatoes*	1 tablespoon chili powder

Put red beans in saucepan with enough water to cover. Bring to a boil, reduce heat to simmering. Brown the meat with onions in skillet. Drain off all fat. Add meat to saucepan with beans and continue cooking, adding more water if necessary. When beans are soft, add tomato and seasonings. Cook until thickened. Serve with cornbread or crackers.

6. Serve a food full of iron at one main meal today

Cheesy Meat Loaf

1 ½ pounds ground beef	2 eggs*
½ teaspoon salt	½ cup American or Cheddar cheese, grated*
¼ cup finely chopped onion*	½ cup pineapple juice
1 ¼ cup flaked WIC cereal*	1 teaspoon pepper
½ cup tomato sauce*	

Preheat oven to 350 degrees. Put all ingredients in a large bowl and mix well. Put mixture in a baking dish. Bake for 45 minutes. Makes 6 servings.

7. Look for iron rich recipes if you serve dessert

Yogurt Fruit Crunch

2 cups plain or vanilla lowfat yogurt	1 cup fresh, dried, or canned fruit*
1 cup crunch WIC cereal*	

Spoon layers of cereal, yogurt, and fruit into four bowls or glasses. You may also add chopped nuts and coconut if you like. Try dried apricots, dates, or raisins for an extra iron boost.

Build Your Body with Iron

Feedback Form

1. List a food full of iron that you could eat for a snack: _____

2. What is one way you could add more iron into your family's meals? _____

Iron In Foods: Does My Child Get Enough?

Your child needs enough iron:

- To support his or her rapid growth.
- To replace iron that the body uses up.
- To have enough energy to learn and play.

Iron-deficiency anemia is a common nutrition problem for young children. Checking for anemia should be part of your child's regular health exam. Not sure? Ask your child's health care provider.

You need enough iron, too.

Everyone in your family needs iron from food to feel good and stay healthy. Women need it to replace the iron lost each month through menstrual flow. Include iron-rich foods in your family meals and snacks. Your child will benefit, too.

Warning: Iron Poisoning!

Iron pills meant for you can be harmful to your child. Even iron supplements for children can be dangerous if they are not taken as directed. Too much iron from a pill can cause serious injury, even death.

You can:

- Keep pills with iron in a child-safe container where your child cannot reach.
- If your child accidentally swallows iron pills, call your health care provider or the poison control center right away.

Write down the phone number for your local poison control center:

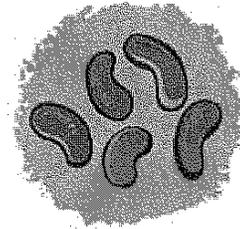
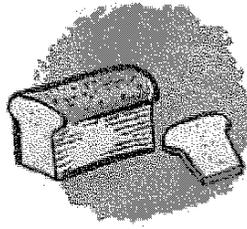
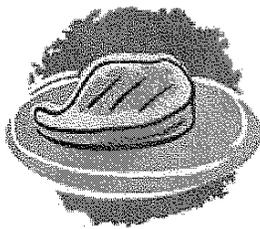
- Offer iron supplements to your child only as directed by your health care provider. **Your child will not get iron poisoning from food.**

Good Sources of Iron

Offer these foods often.

- Lean meat
- Iron-enriched and whole-grain breads and cereals
- Cooked dried beans (black, kidney, lima, navy, pinto, soy beans)
- Greens (collard, kale, mustard, spinach, turnip)

Chicken, egg yolks, and dried fruit (raisins, apricots) have iron, too, but not as much.



Provided by _____

Iron In Foods: Does My Child Get Enough?

Great Pairing!

The body uses iron from meat and chicken better than iron from beans, grain products, vegetables, dried fruit, and egg yolks. Good news: vitamin C helps the body use the iron from plant-based foods. Foods you serve your family make a difference. Try this!

Food with iron

Food with vitamin C

Iron-fortified breakfast cereal

with berries or juice

Peanut butter sandwich

with a tangerine

Kidney beans in chili

with tomato sauce

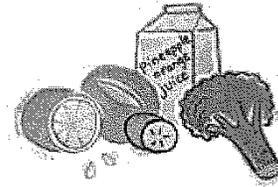
Hard-cooked egg

with orange juice

Pasta salad

with bell peppers

Your choice: _____ with _____



For extra iron, combine two foods that are good sources of iron:

Food with iron

Meat source of iron

Whole-grain bun

with lean hamburger patty

Refried beans

with chicken burrito

Cooked collard greens

with lean barbecued beef

Brown rice

with pork stir-fry

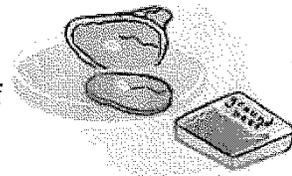
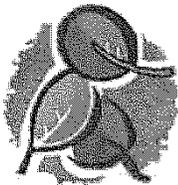
Scrambled egg

with lean ham

Whole-wheat bagel

with lean deli meat

Your choice: _____ with _____



Provided by _____

NIBBLES FOR HEALTH 23 Nutrition Newsletters for Parents of Young Children, USDA, Food and Nutrition Service