Iron-Deficiency Anemia

Many children below the age of five receive inadequate amounts of iron from their daily diet. Iron is an essential mineral needed to produce red blood cells. Red blood cells transport oxygen from our lungs to our muscles and organs. Insufficient amounts of red blood cells in our blood can lead to iron-deficiency anemia.

Symptoms of iron-deficiency anemia include fatigue, irritability, headaches, and an inability to concentrate. If a young child remains severely anemic for a prolonged period of time, irreversible damage to brain development can occur. Cognitive development can also be affected in children who don’t demonstrate visible symptoms. Because of these serious consequences, regular screening and early diagnosis is crucial. Testing for anemia can be done at your doctor’s office or health clinic. Only a very small amount of blood is required, which can easily be obtained by a quick finger prick.

Note: It is important to know that if children are tested immediately following a viral infection test results may indicate a brief, borderline anemia, which will remedy itself on its own.

Ways to Consume More Iron~

- Increase intake of foods rich in iron: beans, lentils, eggs, chicken, turkey, iron-fortified cereals, dark leafy greens, broccoli, and dried fruits.

- Eating foods rich in Vitamin C (i.e. orange juice, citrus fruits, bell peppers) while eating iron-rich foods, helps your body absorb more iron.

- Calcium decreases iron absorption. Avoid eating calcium-rich and iron-rich foods together.

- Cooking with uncoated cast-iron cookware helps to boost the iron content in foods.
Farmers Markets are a great way to shop for delicious and nutritious produce while supporting our local farmers. There are more than 60 Farmers' Markets located in various cities and communities throughout the San Francisco Bay Area. These Markets offer the finest farm-fresh fruits and vegetables as well as just-picked flowers, baked goods, and locally made cheeses. Foods sold at farmers markets are usually picked fresh that day and come from farms located within five neighboring counties of the market. Not only is the food fresher, but the fruits taste sweeter, the vegetables are crisper, and the produce is affordable. Eating fresh fruits and vegetables are important for our health. The fresher the foods are the better. So why not eat foods straight from the farm?

Activity Idea
~ Take students on a field trip to the Farmers Market to promote fresh fruit and vegetable consumption.
~ Let kids participate in taste testing.
~ Contact Farmers Market Managers to set up food demonstrations by farmers.

The following is a list of Farmers Markets in Alameda County:

**Alameda**
Taylor & Webster
Tuesdays: 9:30am-1:00pm
(800) 949-FARM
www.pcfma.com/alameda.htm

**Berkeley**
Derby & Martin Luther King, Jr. Way
Tuesdays: 2:00-7:00pm
Center Street & Martin Luther King, Jr. Way
Saturdays: 10:00am-3:00pm
Market Manager: Penny Leff
2530 San Pablo Avenue
Berkeley, CA 94702
(510) 548-3333 / Fax: (510) 548-2240
bfm@ecologycenter.org
www.ecologycenter.org

**Fremont**
Fremont Irvington, Bay & Fremont Blvd
Sundays: 9:00am-1:00pm
Fremont Centerville, Bonde & Fremont Blvd
Saturdays: 9:00am-1:00pm
June-November
(800) 897-FARM

**Hayward**
Main & B Street
Saturdays: 9:00am-1:00pm
(800) 897-FARM

**Oakland**
East Bay Faith Deliverance Church
E.14thSt & 73rd Ave
1st Friday of every month: 3:00-7:00pm
(510) 638-1742

**Oakland—Grand Lake**
Grand & MacArthur
Saturdays: 9:00am-2:00pm
(800) 897-FARM

**Oakland—Jack London Square**
Broadway & Embarcadero
Sundays: 10:00am-2:00pm
(800) 949-FARM
www.pcfma.com/jack_london_square.htm

**Oakland—North Oakland/Temescal**
49th St (1/2 block above Telegraph)
Sundays: 9:00am-1:00pm
(510) 238-2197

**San Leandro**
Bayfair Mall, Fairmont & East 14th
Saturdays: 9:00am-1:00pm
(800) 806-FARM

**Union City**
Old Alvarado District, Cesar Chavez Park
Saturdays: 9:00am-2:00pm
May-November
(800) 949-FARM
www.pcfma.com/union_city.htm

Adapted from the California Farm Fresh Guide Community Alliance with Family Farmers
**Colorful Foods for Health**

Research suggests that phytochemicals, working together with nutrients found in fruits and vegetables, may help slow the aging process and reduce the risk of many diseases, including cancer, heart disease, stroke, high blood pressure, and osteoporosis.

Pronounced "fight-o-chemicals," phytochemicals fight to protect your health. "Phyto" is a Greek word that means plant. Phytochemicals are usually related to plant pigments. Fruits and vegetables that have bright colors - yellow, orange, red, green, and purple - generally contain the most phytochemicals and the most nutrients.

You can benefit from all of the phytochemicals and nutrients found in plant foods by eating 5-9 servings of fruits and vegetables a day and eating more whole grains and soy.

*Remember, to get your Phytos by eating 5-9 servings of colorful fruits and vegetables every day!*

*Adapted from [www.dole5aday.com/Teachers/T_Index.html](http://www.dole5aday.com/Teachers/T_Index.html)*

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**Nutritious Summer Recipes**

Caterpillars

*Ingredients*

- ½ Cup Corn Flakes
- 1 package (11 oz) Refrigerated Soft Bread Stick Dough
- Toppings: (optional—substitute as desired)
  - 1 medium-size container of Herb Cream Cheese, applesauce, or fruited yogurt
  - 1 large piece of waxed paper
  - 1 un-greased baking sheet
  - Plastic sandwich-size bags

*Method:*

1. Pre-heat oven 350ºF.
2. Put cereal into plastic bag and lightly crush.
3. Unravel breadstick dough onto sheet of waxed paper one at a time.
4. Fold dough stick in half to be 6 inches long.
5. Put dough into plastic bag and shake until coated with cereal.
6. Place on baking sheet, slightly curving dough to look like a caterpillar.
7. Repeat with remaining pieces of dough, leaving a 1 in gap between dough caterpillars.
8. Bake for 15 minutes or until light brown.
9. Let cool for 5 minutes.
10. Eat warm, dipping caterpillars into desired topping.

Makes 8 Caterpillars

*Adapted from [www.tea.state.tx.us/CNP/5aday/recipes.pdf](http://www.tea.state.tx.us/CNP/5aday/recipes.pdf)*

Three Bean & Vegetable Chili

*Ingredients*

- 2 teaspoons vegetable oil
- 2 14 oz can kidney beans
- 2 14 oz can pinto beans
- 2 14 oz can black beans
- 2 small onions (chopped)
- 2 green bell peppers (chopped)
- 1 16 oz can corn (fresh or frozen preferred)
- 2 15 oz cans diced tomatoes
- 2 teaspoons ground cumin
- chili powder, salt and pepper to taste

*Method:*

1. Drain the liquid from the beans and corn.
2. Heat oil in the bottom of a large pot over medium heat. Add chopped onions and bell peppers. Sauté until onions are soft about 5-10 minutes. Add tomatoes, beans, corn and spices.
3. Stir over flame until thoroughly heated, about 10 minutes.
4. Taste to see if you need to add more chili powder, salt, or pepper.
5. Spoon onto plates and enjoy!!

Makes 25 small servings

*Adapted from Cookshop, A curriculum guide for grades K-6, by Jennifer Castle Community Food Resource Center, New York, 1998.*
Community Events

2. September 29th: PACT~“Parent Action for Child Care Today.” Come together to discuss your child-care needs with policy makers and legislators. Oakland Asian Pacific Cultural Center, 388 9th St, Suite 290 (Near the 12th St. BART) 8:30-3:30 pm Register by calling (415) 882-0234 or visit www.parentvoices.org.
3. October 23rd: “Working with Families with On-going Violence,” presented by the Prevent Child Abuse Alameda County Council. 9:00-11:30 am, Eden Hospital-Castro Valley. For more info call (510) 780-8989.

Children’s Storybooks

1. *The Very Hungry Catepillar*
   The simple, bright graphics in this classic book make it a hit with kids. A very hungry caterpillar eats his way through a week’s worth of food to become a very big caterpillar, a cocoon, and eventually a beautiful butterfly. It is a great way to discuss the significance of hunger and food to growing big and strong. *Ages 4-8.*

2. *The Magic School Bus Inside the Human Body*
   By: Joanna Cole, Scholastic, 1989
   The Magic School Bus is carrying Ms. Frizzle and the entire class on a field trip. The bus shrinks and is accidentally eaten by Arnold. As the bus and journeys through Arnold’s body it provides a first-hand look at major parts of the body and how they work. *Ages 4-8.*

Websites

1. **Dole 5-A-Day**
   Explore Dole’s website on the wide world of fruits and vegetables. Kids can play games and teachers can preview 5-a-day resources. This is an interactive and fun site that promotes healthy eating and lifestyle habits.
   http://www.dole5aday.com/index.html

2. **Seeds of Change Educational Gardening**
   Resources for parents and teachers on teaching about gardening. This site has seasonal activities, history, recipes, teaching aids, and more.
   http://www.mnh.si.edu/garden/welcome.html

3. **USA Pears PearBear Healthy Kids**
   This site focuses on nutrition for preschoolers. Plenty of fun activities on pears can be found here, such as: read-aloud stories (*The PearBear Chronicles*); pear recipes (like Bunny Hop Salad); letters from PearBear; and, even coloring sheets. They just might help you to get your kids to eat more pears!!
   http://www.usapears.com/pbnw-kids.html

Comments & Suggestions

You can contact us at cealameda@ucdavis.edu. We look forward to hearing from you.

Lucrecia Farfan-Ramirez
County County Director
(510) 567-6812

If you have any comments or suggestions, please e-mail to cealameda@ucdavis.edu.

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Iron deficiency anemia is a common type of anemia—a condition in which blood lacks adequate healthy red blood cells. Red blood cells carry oxygen to the body's tissues. As the name implies, iron deficiency anemia is due to insufficient iron. Without enough iron, your body can't produce enough of a substance in red blood cells that enables them to carry oxygen (hemoglobin). As a result, iron deficiency anemia may leave you tired and short of breath. You can usually correct iron deficiency anemia with iron supplementation.

Iron deficiency anemia is the most common type of anemia, and it occurs when your body doesn't have enough of the mineral iron. Your body needs iron to make hemoglobin. When there isn't enough iron in your blood stream, the rest of your body can't get the amount of oxygen it needs. While the condition may be common, many people don't know they have iron deficiency anemia. It's possible to experience the symptoms for years without ever knowing the cause. Iron deficiency anaemia is the most common type of anaemia. There are other types, like vitamin B12 and folate anaemia, that the blood test will also check for. Treatment for iron deficiency anaemia. Once the reason you have anaemia has been found (for example, an ulcer or heavy periods) your GP will recommend treatment. If your blood test shows your red blood cell count is low (deficient), you'll be prescribed iron tablets to replace the iron that's missing from your body.