Information on Blood Donation and Iron Health  
September 2020

Purpose:
This document was developed by AABB’s Donor Health and Safety Committee in response to member feedback and requests for a tool to be used with Association Bulletin #17-02 Updated Strategies to Limit or Prevent Iron Deficiency in Blood Donors. Specifically, AABB members requested a donor education tool similar to Association Bulletin #12-03.

AABB is posting this tool as an optional resource to:
- accompany Association Bulletin #17-02 Updated Strategies to Limit or Prevent Iron Deficiency in Blood Donors
- assist blood centers interested in additional information on the topic.

AABB would like to acknowledge the work of the Donor Health and Safety Committee.

For more information:
Contact the AABB Regulatory Affairs Team at regulatory@aabb.org
INFORMATION ON BLOOD DONATION AND IRON HEALTH

Thank you for donating blood today. Because red blood cells contain iron, donating blood lowers your body’s iron stores.

- All blood donors are at risk for developing iron deficiency if the iron removed is not replaced before the next donation. Iron stores may be low even if your hemoglobin level is sufficient to donate blood.
- Some donors are at increased risk:
  - Young donors, 16 to 25 years old
  - Pre-menopausal women (due to menstrual blood loss)
  - Frequent donors
    - WOMEN: 2 or more whole blood donations in a 12-month period
    - MEN: 3 or more whole blood donations in a 12-month period
    - very frequent (or volunteer but not paid plasma) platelet donors (> 12x/year)
    - Donors on plant-based diets

The following information will help you maintain healthy iron levels by replacing the iron lost during blood donation:

- A healthy, iron-rich diet helps, but cannot replace iron losses in just a few months without supplements.
- You may consider taking a multivitamin with iron or an iron supplement containing 18-38 mg (milligrams) of elemental iron each day for 60 days after donating whole blood or one apheresis red blood cell and after every 5 apheresis platelet/(volunteer) plasma donations. Your healthcare provider or pharmacist can help you choose the type of iron that is best for you and suggest when to take it to avoid interaction with other medications.
- If you donate double red cells, we suggest taking iron for at least 60 days. It may take up to 120 days to replace the iron removed in two red cell donations.
- If you prefer not to take supplements, you may choose to extend the time between red blood cell donations. At least 6 months may be needed for donors with already-low iron stores.

Are there additional concerns for younger donors?

- Teens’ iron stores are typically lower than those of older adults. It is especially important for 16-, 17- and 18-year-old donors to take iron after donating blood.
- The body’s iron stores support healthy brain development. Because development continues through the mid-20s, it may be advisable for 19- to 25-year-old donors to take iron.

How can I tell if my iron is low?

- The finger prick test done prior to donation checks to make sure that you have enough red blood cells to safely donate blood, it does not guarantee adequate iron stores.
- Many people with low iron stores feel fine and have no symptoms.
- Some people feel tired, lack energy and endurance, or have trouble concentrating.
- The desire to eat non-food substances like ice, chalk, starch, or clay can suggest iron deficiency.
- A ferritin blood test can be performed by your healthcare provider to tell if your iron is low.

What should I know about taking iron?

- People with a family or personal history of hemochromatosis (iron overload), or who have gastrointestinal disorders (i.e. inflammatory bowel disease), should not take iron unless approved by a healthcare provider.
- Start iron soon after your donation when it’s best absorbed and used to produce red blood cells lost during your donation.
- Taking iron with vitamin C (drinking orange juice) may increase uptake of iron.
- Avoid taking iron with dairy products, coffee, tea, or eggs.
- Higher doses will not increase iron absorption, may result in more side effects, and could delay diagnosis of blood loss from gastric ulcers or colon cancer.
- Iron should always be stored away from children and pets to prevent accidental poisoning.