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December 11, 2024

Give the Gift of Life this Holiday Season

When my son turned 17 this past March, he said to me, "Mom, I want to give blood, and now I can do it without parental approval!" I was surprised on two counts: one, that this was a priority for him, and two, that he would assume I would not approve. Either way, he rolled up his sleeve and proudly gave blood this fall.

I admit, I have not donated blood ... yet. I always seem to be on medication, challenged by health concerns, and frankly a little intimidated – not by needles, but by seeing blood leave my body! However, since my father was treated for leukemia several years ago and needed many platelet transfusions, I must say donation has been on my mind.

Many of you reading this have donated blood, and may even be regular donors. We also recognize and appreciate that some members have religious beliefs that do not permit the giving or receiving of blood.

Who Needs Blood?

Each donation of blood can save up to three lives. Or a single donation may be added to other donations to save one accident victim that requires significant multiple transfusions.

Those who most commonly receive blood include:

- People with sickle cell anemia
- Pregnant women needing surgery
- Individuals who have been in accidents, particularly car accidents

- Patients who have low platelets
- Patients with leukemia, kidney disease, and other conditions

Types of Donations

There are many ways you can donate:

Whole blood: This is the most common type of donation, where your blood could be divided into red blood cells and plasma. A typical whole blood donation is one pint (approximately 1/10 of your body's blood volume). Donating whole blood takes 10 – 15 minutes and you can donate every 56 days. Red blood cells have a shelf life of about 42 days.

Platelets: Platelets are small, disc-shaped cells that aid in blood clotting and are most often donated to cancer patients, organ recipients, and those undergoing heart surgery. Patients (like my dad) often require multiple transfusions: keeping a steady platelet supply in the blood bank is very important, especially considering a platelet's shelf life is *only 5 days!* Donation time is longer at approximately 90 minutes and, based on the process used, you can donate platelets every seven days, up to 24 times a year.

Plasma: Plasma is the light yellow liquid in your blood that makes up about 50% of your blood's total volume. It contains proteins that help control bleeding and fight infections. Plasma is used to treat various bleeding disorders and is given to those who have suffered major traumatic injuries. Plasma donation takes about 40 minutes, and you can donate plasma every 28 days. And, the good news is that plasma can be frozen for up to one year.

The collection of platelets and plasma each involve connection to a machine that separates out the platelets or plasma (or both) and returns your red blood cells to your body. To learn more, check out these two videos:

[Plasma protein products](#)

[Plasma for transfusion](#)

There are other ways to donate, such as stem cell registry and umbilical cord blood. For more info [click here](#).

Who Can Donate?

Contrary to my original thinking, there are very few factors that make someone ineligible to donate blood.

The factors that come into play include certain medications – a list which appears much smaller than the medications that are considered acceptable – recent travel, specific medical conditions, and pregnancy. It is important to remember that donor eligibility and ability to donate can change over time.

To be a blood donor in Canada, without parental permission, you need to be at least 17 years old and meet minimum height and weight requirements:

- weigh more than 110 pounds
- be in good health
- be screened for some medical conditions, such as anemia
- wait 56 days between each time donating blood

[Click here](#) for more information on eligibility.

[Click here](#) to learn which medications impact your eligibility.

What is the Process?

On the day you give blood, to ensure your safety and health, it is recommended that you:

- Drink an extra 16 ounces of water or other non-alcoholic beverage before your appointment
- Eat a healthy meal, avoiding fatty foods like hamburgers, fries, or ice cream
- Exercise *before* donating blood, not afterwards
- Take iron tablets, particularly for young, teenage donors
- Wear a shirt with sleeves that you can roll up above your elbows
- Have somebody else drive you to and from the blood bank

When you get to the blood bank, you will answer a few questions about your medical history. You will also be asked about any recent travel, infections you may have, and medicines you take. Your answers help blood bank staff know if you are healthy enough to give blood. They will then check your temperature, pulse, blood pressure, and blood count.

During the actual donation, which for full blood donation takes about 10-15 minutes:

- You will either be seated or lying down

- A technician will find a vein in your arm by tying a rubber tube around your upper arm, and clean the skin over the vein with rubbing alcohol
- The technician will insert a needle into your vein. You may feel a small prick, much like getting an injection
- Your blood will flow into a tube connected to the needle and into a bag, where it is kept until it is needed
- After the session, you may feel a little lightheaded or dizzy, and this feeling should dissipate after a few minutes. You may have some bruising on your upper arm, and may feel a bit of pain around the injection spot
- It is recommended that you drink extra fluids for 24 hours. Most blood banks will offer snacks to donors once they have finished giving blood

Benefits of Donating

Like my son, many of us are motivated to donate as an act of kindness, a very personal way we can give to others.

However, regular donors also experience physical health benefits from blood donation. When you give blood, your system needs to replenish that blood with healthy blood cells, usually within 48 hours. This replacement alone has a positive effect on your organ function and cellular nutrient distribution. Overall health benefits of donating blood include:

Free Health Screening

As you need to be healthy to pass the basic requirements of donation, the blood bank will first conduct a free health screening to ensure that there are no chronic medical conditions that would impede the use of the blood collected.

Improves Your Mental Health

Donating blood can lower your risk for depression and other mental health concerns, based on research that included the differences in the level of cortisol (stress hormone) of regular donors. There is also the satisfaction and dopamine surge that happens when you do something good or altruistic, making you feel motivated, energetic, and content.

Can Stabilize High Blood Pressure

People with hypertension can still be eligible to be a blood donor, providing they have normal blood pressure at the time of the donation. When you regularly donate and you have hypertension, it may help the condition by stabilizing your blood pressure.

May Protect You Against Cardiovascular Disease

Although research has not established definitive evidence to connect blood donation to the prevention of heart attacks, it follows that the stabilization of blood pressure could reduce the risk of cardiovascular disease and stroke. Regular blood donation also leads to improved blood circulation which can reduce blockage in the arteries.

Can Improve Your Liver Functions

Iron buildup affects your liver. However, if you regularly donate blood, you can avoid this condition as iron levels decrease when your blood cells are replenished. As a result, you get extra protection against diseases like hepatitis C, non-fatty liver disease (NFLD), cirrhosis, and other related liver issues.

A Gift to Consider for the Holidays

Our blood could be the lifeline that someone desperately needs in a medical emergency. Whether it is a car accident, a complicated surgery, or the requirements of cancer treatment, our donation can make a huge difference. It is also an impactful way to support our communities and inspire a culture of giving and compassion, which is exactly what my son's desire to donate did for me. I will be rolling up my own sleeve, just in time for the holidays.

Happy holidays to you and yours, and may you find time to rest, ReFresh, and feel joy over the winter break!

Sources

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A handwritten signature in black ink, appearing to read 'R. Morandini', with a stylized flourish at the end.

Rochelle Morandini

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If you would like to contribute or have ideas about what you would like to see in the ReFresh series, we would love to hear from you: contact rochelle@bcpvpa.bc.ca.