

GIVE BLOOD; GIVE LIFE



GIVE HOPE
*blood transfusions help
keep our sick, strong*

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MADELINE REICHEL

Abstract

This paper details the importance of donating an individuals' blood. It gives background information on the elements in blood, what a blood donor and donation is, and how significant it is to donate blood. It goes on to suggest ways to overcome the most common fears associated with donating blood. Furthermore, the paper explains the health benefits, immediate and long-term, that the donor reaps from their donation. The paper elaborates on how important the health benefits are to a lifestyle that has a lower risk of heart attack and stroke. The paper incorporates a memory study by Dr. Steven Breckler whose findings say that one remembers experiencing more anxiety than actually felt during a blood donation, it employs personal testimonies, as well as utilizes examples from past catastrophic events as relatable situations for the audience. Last, the paper explains the simple process to make an appointment to donate.

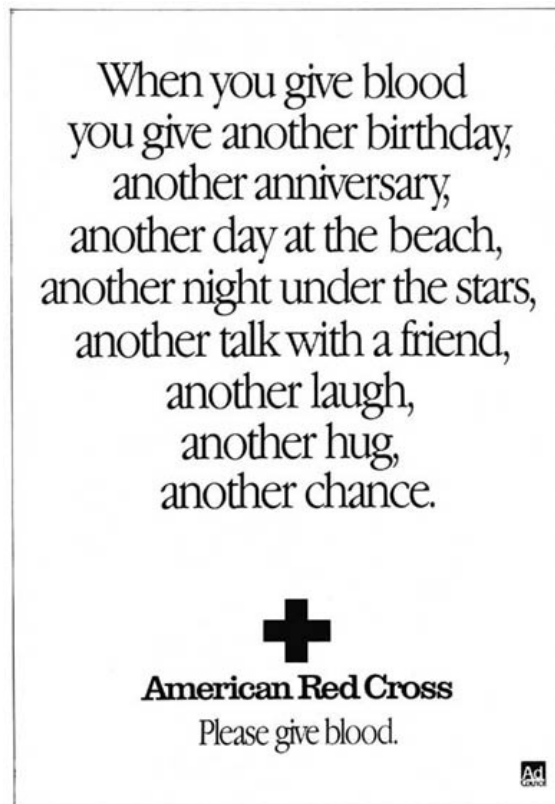


FIGURE 1: THE AMERICAN RED CROSS SUPPLIES ABOUT 40 PERCENT OF THE NATION'S BLOOD SUPPLY.
SOURCE: AMERICAN RED CROSS

What is Blood?

Blood is the red fluid that circulates in our blood vessels and is essential for daily life. It is made up of two components, cells and plasma, liquid and solids that work together.



FIGURE 2: THE COMPONENTS OF BLOOD ARE RED CELLS, WHITE CELLS, PLATELETS, AND PLASMA. ALL HUMANS PRODUCE THESE BLOOD COMPONENTS.
SOURCE: WWW.ADAMBOLTON.CO.UK

Plasma, the liquid part, is made up of water, salts, and proteins. Over half the blood running through our veins is plasma. The solid part contains red blood cells, white blood cells, and platelets. Red blood cells are responsible for delivering oxygen from your lungs to the tissues and organs, while white blood cells fight infection. Platelets help blood to clot when you have a cut, eventually allowing the cut to heal. Having enough of these components flowing through our veins is essential to living a healthy lifestyle. Not all blood is alike even though it is all made up of the same two components. There are four major blood groups, but eight different blood types, which are defined by the presence or absence of two antigens- A and B, and are located on the red blood cells (“Blood Types”). There is no substitute for blood, it cannot be made or manufactured, only donated. Since not all blood is the same, it is important for individuals to donate because their blood could be a match for someone who is in dire need. Donors are the only source of blood for the patients who need it.

What is a Blood Donation?

A blood donation occurs when a person voluntarily has blood drawn to help a patient in need. Patients in need of blood donations can range from accident victims to people with illnesses such as cancer. There are different types of blood donations that a donor can choose to participate in. The most common form of donation is ‘whole blood’ in which a pint of ‘whole blood’ is donated. The pint of blood is separated into red cells, plasma, platelets, and/or cryoprecipitated AHF (“Types”). Each pint of donated blood is tested for seven different types of infectious diseases, so there is no chance for a transfer of diseases from donor to recipient. There are other donations that include double red cells, platelets, and

plasma donations. These donations are equally as important as whole blood donation, but just take more time. The best type of donation for each person depends on his or her blood type, physical characteristics, and personal preferences. The American Red Cross says that, “giving the ‘right type’ of donation helps ensure the best use of your valuable contribution” (“Types”).

Who Can Donate Blood?

To donate blood you must be at least 17-years-old, weigh at least 110 pounds, and be in generally good health. In generally good health, according to the American Red Cross means that you are well enough to do normal activities (“Eligibility”). These restrictions are put in place to protect the donors’ health and wellbeing.

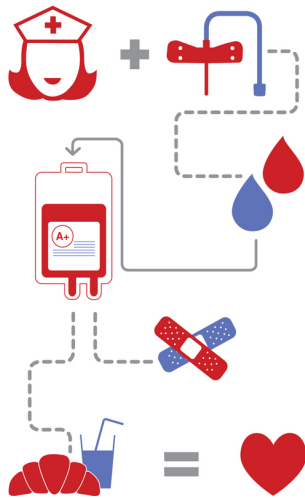


FIGURE 3: THE DONATION PROCESS BEGINS WITH YOU.
SOURCE: AMERICAN RED CROSS

However, there are a few restrictions as to who can donate blood either at their scheduled appointment or throughout their lifetime. The most common, temporary, reasons that volunteers are deferred are that the individual is underweight, their iron levels are not sufficient, the volunteer is pregnant, their blood pressure is too high, or the volunteer recently got a new tattoo or piercing (“Eligibility”). This temporary reason to be deferred is due to the time period that the piercing or tattoo requires to successfully heal. This time period can range from 6 months to 1 year, so be sure to check with your donating center and piercing or tattoo artist on the correct wait time. Do not let being deferred discourage you from donating later,

most of the time deferrals are temporary and that individual can donate blood at a later point.

Be a Hero

Since blood cannot be man-made or manufactured, organizations and hospitals rely solely on volunteer blood donors. Whether you are donating for yourself, for your family, or for a friend, your contribution is valuable and your contribution is important. The need for blood is constant and will not diminish in the near future. From natural disasters and unforeseen catastrophes, emergency hospital procedures, to life-long battles with chronic diseases, the demand for blood is constant and the supply is

not. Since there is no substitute, only volunteer blood donors can roll up their sleeves and save lives. For each pint of blood a donor donates, up to three other lives can be saved (Boreli). Where else can you volunteer one hour of time and moment, family members, others in your community are are born day and night, often surgery patients may need life- don't need a specific reason to own. Only you can volunteer to website says it best, "The need is constant. The gratification is instant. Give blood." (American).

**“You don't need
a specific reason
to donate blood;
you just need
your own.”**

SOURCE: AMERICAN RED CROSS

save up to three lives? At this neighbors, friends, co-workers, and depending on you. Premature infants requiring blood to survive. Cardiac sustaining blood transfusions. You donate blood; you just need your give the gift of life. The Red Cross's

Overcome Your Fears

The fear of giving blood for the first time is usually cited as the fear of the needle, the sight of one's own blood, or a combination of the two ("Blood"). There are some who fear the pain of the needle, or fear becoming weak because of the loss of blood ("Blood"). However, to even be considered to donate one must be in generally good health. Elaborating on being in generally good health means that the donor will have 10 to 12 pints of blood in his or her body at that time, and one can in turn, safely donate one pint of blood ("Blood"). To overcome one's fear of the needle or pain from the needle, there are a few suggested ways to be distracted during your donation time. First, many previous donors state that the needle prick only feels like a slight pinch and is over in seconds. The best course of action to take when the needle is inserted is to not think about it. While the staff is putting the needle in your arm one can read a book or magazine, listen to music, watch TV, or have a conversation with the staff members. Additional ways to overcome an individual's blood-donating phobia is know what to expect before, during, and after the process. Familiarize yourself with the process and make sure to ask questions to alleviate any anxieties ("Getting"). Remembering why you were inspired to donate in the first place additionally helps to squash concerns about donating.

Other blood-donating phobics cite reasons such as they don't have the right blood type and/or I am too busy ("Why"). These reasons can be disqualified beginning with every blood type is the right blood type to donate. Each person who expresses an interest in donating blood is fully encouraged to

pursue the
make an
entire blood
takes about an
while the
donation process takes

2



**Every 2 seconds
someone needs a
blood transfusion**

**FIGURE 4: THE NEED FOR BLOOD DONORS IS SIGNIFICANT.
SOURCE: AMERICAN RED CROSS**

donation and
appointment. The
donation process
hour of your day,
actual blood
only about 7-10 minutes

("Why"). So, DVR that new episode of your favorite show and instead make an appointment at your nearest blood donor center instead. If you actually stop to think about it, an hour of your day could mean a lifetime for a premature baby.

Furthermore, Steven Breckler, a professor at Johns Hopkins University conducted a study "Memory for the Experience of Donating Blood: Just How Bad Was it?" The study was an experiment that "investigated the accuracy of first time blood donors' memory for the emotions they experienced during blood donation" (Breckler). The public hears about positive blood donating experiences, but also the donation experiences that fall outside of the bell curve. These stories usually incorporate negative emotional experiences, are often the most remembered, and are used as excuses by potential donors. The introduction to the study states the main idea in one solid sentence, "...on memory for past emotional experiences and investigates how those memories can influence behavioral intentions for the future" (Breckler). Basically meaning that the first time a donor donates, dictates whether the donor will become a repeat donor.

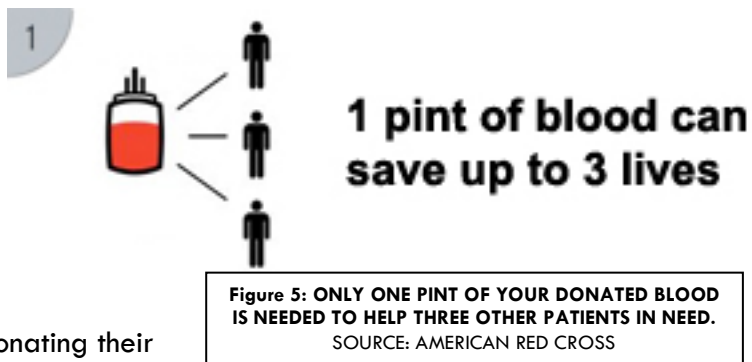
Breckler's study found that "compared to what they reported at the time of donation, the donors remembered a greater contrast between predonation and postdonation emotions" (Breckler). Essentially meaning that the donors actually remembered experiencing more anxiety than they actually did. The study reports that, "research on memory for emotion confirms that past emotional experiences are often

misremembered” (Breckler). This finding is hard evidence that proves most people misremember experiences due to their emotions, and donating blood is an evident example of this.

Health Benefits for Donor

Not only is donating blood extremely beneficial to those on the receiving end but there are greater health benefits for the donor. Reciprocal altruism is a concept that many know the essential meaning of, but are unaware that the concept has a name. Reciprocal altruism is an act of kindness, or type of behavior when one individual helps another, and at some future point the second individual returns that same kindness either to

the same person, or to a different person. Donating blood is an example of reciprocal altruism in the way that at the time of the donation, the donor is altruistically donating their



and time in hopes that one day, if that donor, or the donor’s loved one, needs a blood transfusion there will be blood to help the patient in need. This concept of reciprocal altruism is a mental health benefit of donating blood.

When a donor makes an appointment to give blood he or she goes through a health screening process in the beginning. Through this process a trained staff member will first check the potential donor’s pulse, body temperature, blood pressure, and hemoglobin levels in a sample of blood (Boreli). These health checkups are performed free of cost and are of great benefit to the donor. Dr. Robert Richmond states that, “the process of screening blood donors, simple though it is, quite effectively detects problems that result in increased risk to the person giving blood” (Richmond). This fact is the initial reason why donating blood is beneficial to the donor’s health. For example, one will come to know if there are any blood pressure abnormalities, which could help diagnose some of the latent diseases at early stages before they have the chance to create more serious medical problems. The donated blood is also tested for seven infectious diseases. The tests performed on every unit of donated blood are Anti-

Trypanosomacruzi, Hepatitis B virus, Hepatitis C virus, Human immunodeficiency viruses, Syphilis, and West Nile virus (“Blood Testing”). After the blood is donated the blood and blood products are further tested for certain infections and the donor can choose to be informed if there are any abnormalities.

Blood donation also has the benefit of preserving one’s cardiovascular health by reducing the blood’s viscosity. Blood viscosity has been directly linked to cardiovascular health, says the Harvard Medical School Family Health Guide (Boreli). The thickness and stickiness of your blood and how much friction it creates through your blood vessels determine how much damage is done to your cells that line your arteries. Reducing blood viscosity is important and can be done through blood donations. Donating can also reduce the iron levels in your blood, which leads to oxidation of blood and potentially an increase in oxidative stress, which can be damaging to your cardiovascular system (Boreli). Blood donation even reduces the risk of heart attack and strokes. A study published by the Journal of the

American Medical Association found that participants ages 43-61 had fewer heart attacks and strokes when they donated blood every six months (Boreli).

The third benefit of donating blood is that it reduces the risk of cancer by lessening the iron levels and stores in one’s blood. The removal of oxidative iron from the body through blood donations means less iron oxidation and reduced cardiovascular diseases. Iron has thought to increase free-radical damage, which also leads to an increased risk of cancer. The Journal of the National Cancer Institute published a study following 1,200 people were who split in groups of two over the course of 4 ½ years (Boreli). One group reduced their iron stores by blood donations twice a year, while the second group did not make any lifestyle changes. The results showed that the

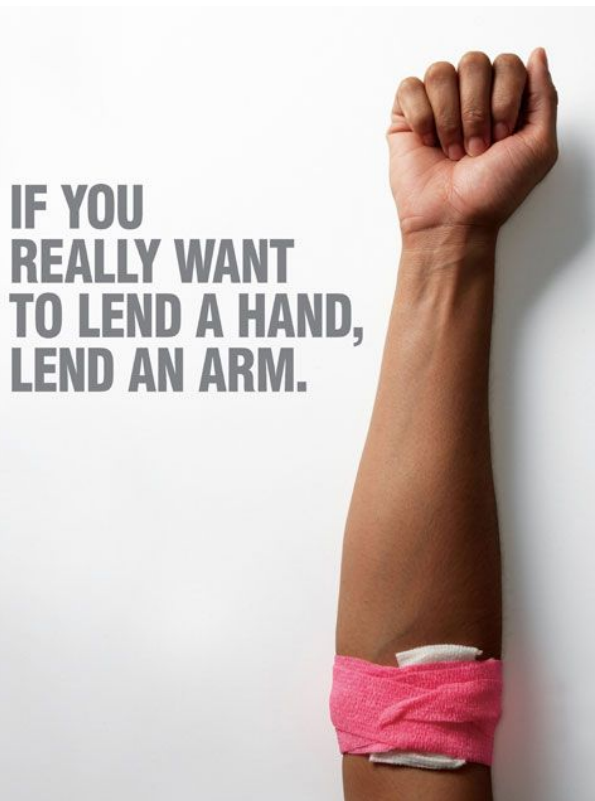


FIGURE 6: DONATING BLOOD IS A SIMPLE PROCESS THAT ONLY TAKES AN HOUR BUT CAN SAVE AN ENTIRE LIFETIME
SOURCE: BLOODBANKER.COM

group of donors had lower iron levels, and a lower risk of cancer and mortality (Boreli).

Another reason for people to donate blood is that it aids in weight loss. According to the University of California, San Diego, people burn approximately 650 calories per donation of one pint of blood (Boreli). However, donating

as a weight loss plan the University requires donors to be at least 110

Whether you are donating member, a friend, or in someone's

vital health benefits. Even on top of these health benefits, there are mental health benefits that accompany donating. Family members and friends join donors at their appointments, even if it is just for moral support. Throughout these appointments donors, their family members, and friends create memories that will last a lifetime, and even possibly create traditions to pass on to younger generations.

“...Donors, their family, and friends create memories that will last a lifetime...”

SOURCE: AMERICAN RED CROSS

blood should not be considered warns. The American Red Cross pounds to even donate.

blood for yourself, a family honor, the donors reap these

Personal Stories

Imagine that your mother or father are in a devastating car accident and are in dire need of a blood transfusion. It is a life or death situation. There is just enough of your mom's type of blood to help save her in emergency surgery. But, what about the victims from the other car? What happens to them? Is there enough blood to help save the newborn baby from the other car? These are situations that doctors and hospitals face each day. Donor blood is the only way to save patients who need blood transfusions. When family members are put into these situations, it commonly sparks the idea that they want to donate blood and help the patients involved in the accident. These are people that are referred to as First Time Donors. Many of the First Time Donors (FTD) are important to the donation process, but it is more crucial to keep them as repeat donors. FTD are motivated to donate blood for a number of reasons including when someone close to him or her needs blood and national disasters. In fact, FTD have been seen to donate blood in larger numbers than repeat donors in these situations (“Does”).

After the devastating events of September 11, 2001, Americans responded in a patriotic manner and wanted to help in several ways, including blood donations. The American Red Cross and America's blood centers received an overwhelming response to their request for blood donors. "Although the blood that was received in response to the disaster was important, the blood that was used for the victims came from the stock already on hand at the blood centres" ("Does"). This real-life example supports the first scenario illustrated at the beginning of the section. Donated blood has to be processed and tested to reduce the risk of infections, so the donated blood collected during then or following a national emergency or disaster is not available for the immediate use. Therefore, to be prepared for these major demands it is critical to have a large inventory of already tested blood which just further amplifies and encourages first time donors to donate, and for repeat donors to keep donating.



Figure 6: FIRST TIME DONORS ARE JUST AS IMPORTANT TO THE DONATION PROCESS AS REPEAT DONORS.
SOURCE: BEHHANCE.NET

Another scenario that inspires first time donors to begin donating blood is when a loved one is in need of blood or is diagnosed with an illness such as cancer. Harold Mendenhall started donating blood when his wife Frankie was diagnosed with breast cancer in 1977. After she died, Mendenhall was able to cope with his grief of losing his wife by going to the blood bank. He said that at least he was able to save those in need of blood transfusions. Mendenhall, a strong and healthy donor, donates six gallons of blood a year by platelets (Boreli). The American Red Cross's website has a page dedicated to personal stories and testimonies of how giving blood saved their life, a loved one's life, or even their positive experiences of donating. Potential donors and donors are encouraged to read these testimonies and add their own stories of encouragement.

Make an Appointment

The American Red

Cross makes donating an incredibly easy process. It is simple to find a donating location close to you. Just log

on to www.redcrossblood.org and on the side there are two ways to locate a

center. Donors enter their zip code into the box when prompted and the page directs you to the blood drive that is closest to you. It then gives you a list of times to choose from and the type of donation you are most interested in. For those who don't have ready access to a computer, the Red Cross provides a phone number to call for availability – 1-800-RED CROSS (1-800-733-2767). Walk-ins are encouraged and welcome at all blood drives.

The American Red Cross also encourages businesses, schools, and organization to host their own blood drives. Instructions for hosting a blood drive are also located on the American Red Cross's website. If there is a specific medical condition that deters a donor from donating, there are also many other ways that that individual can make a difference. These can include becoming a Red Cross volunteer or even donating money to the American Red Cross organization to help them continue their mission.

Conclusion

As the old saying goes, "do good and good will come to you." Donating blood is not only an altruistic action, but it also is exceptionally important to the patients that receive the donated blood. The health benefits that the donor reaps outweigh any fears or reservations that the donor may have, and it is a simple process to find a blood drive and make an appointment.



Figure 7: WITH MORE THAN 200,000 BLOOD DRIVES EVERY YEAR IT IS EASY TO FIND ONE THAT FITS INTO YOUR SCHEDULE.
SOURCE: AMERICAN RED CROSS

right hand
donation

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