How much blood is in the human body?

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Everyone has a different amount of blood in their body depending on their age and size. A person can afford to lose a certain amount of blood without causing any harm to the body.

Blood accounts for roughly 7 to 8 percent of a person's body weight. Read on to find out the average volume of blood in men, women, and children. We also include information on blood loss and blood donation.

Human blood volume

The volume of blood in a person's body will vary according to their size and other factors, but the average quantities of blood are as follows:

- An average-sized woman has about 9 pints of blood.
- An average-sized man has about 12 pints of blood.
An average adult has between 9 and 12 pints of blood in their body.

- An infant has 75 to 80 milliliters of blood per kilogram (ml/kg) of body weight.
- A child has 70 to 75 ml of blood per kg of body weight.

A blood volume test can measure the amount of blood in a person's body. A doctor may use this test to diagnose conditions such as anemia.

The test takes around 1 hour, and a person should not eat anything for 4 hours beforehand. Some blood will be taken from a vein in the arm for testing.

A small amount of a special tracer is injected into the body. A series of images will then be taken that track blood moving around the body.

A complete blood count (CBC) is a different type of medical test that does not look at blood volume. Instead, a CBC will identify how much of each different type of blood cell a person has in their body.

**How much blood can you lose or donate?**

The standard amount of blood taken when a person gives a blood donation is 1 pint. This is approximately one-tenth of the blood in the body and is a safe amount of blood to lose. The American Red Cross advise that a person should wait 8 weeks in between blood donations.

Severe bleeding can be dangerous. When a person loses around one-fifth of their blood volume, they can go into shock.

In medical terms, shock means that not enough oxygen is getting to tissues in the body. Low oxygen levels can cause damage to the brain and other organs.

A deep wound or a cut on or near a vein, such as on the wrist or neck, can bleed heavily. Head wounds may also lead to significant blood loss.

Someone who has severe bleeding will need medical attention. Immediate first response treatment is to:
get the person to sit or lie down

raise the injured area of the body if possible

apply pressure to the wound to slow the bleeding

If someone is bleeding profusely, the body will direct less blood to the skin, fingers, and toes to protect the vital organs. A person who is losing a lot of blood may look pale or start to feel numbness in their fingers.

The heart will speed up to pump the remaining blood in the body to internal organs. Blood pressure usually drops as the body tries to stop blood from leaving the body.

After a person has lost a certain amount of blood loss, they might faint.

A blood transfusion is a medical procedure to give donated blood to someone who needs it. This could be because an individual has lost a lot of blood, or has an illness that affects the blood, such as cancer and sickle cell disease.

Blood transfusions are considered to be very safe procedures and are often life-saving.

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The body makes around 2 million red blood cells per second. Blood cells develop from stem cells in the bone marrow. Stem cells are a type of cell that can create other cells. This process happens continually throughout a person's life.

Blood is made up of different parts. Each part has a different role to play in maintaining health.
Red blood cells carry oxygen and carbon dioxide.

White blood cells help defend the body against disease and infection.

Platelets help to stop bleeding.

Plasma is a fluid that carries the other parts of the blood. It also helps clot blood and supports the immune system.

These different parts of the blood take different amounts of time to be replaced. However, it only takes the body around 24 hours to replace the plasma it has lost.

It takes longer for the body to make more red blood cells — usually between 4 to 6 weeks.

Red blood cells get their color from hemoglobin. Hemoglobin contains iron, so when a person donates blood, some of this iron is lost. It can take 6 to 12 weeks for levels to return to normal.

The body stores iron and will use some of this stored iron after a blood donation. However, a person needs to replace this iron, so they should be sure to eat plenty of iron-rich foods after any blood loss.

Around 55 percent of blood is made up of plasma, and plasma is 90 percent water. It is also essential to drink plenty of fluids after a blood donation to replace what has been lost.

**Takeaway**

Around 7 to 8 percent of a person's body weight is blood. The body can easily replace a small amount of lost blood, which makes blood donation possible.

Losing around one-fifth of the blood in the body is a dangerous medical event that can be life-threatening.
Additional information

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