

THE POWER OF BLOOD: BLOOD CLOTTING

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Our blood is so essential because it serves as a way of transportation by the nutrients our body needs. The oxygen and the nutrients that our blood carries are spread by it at various points to meet the unending needs of our body cells. The multiple wastes produced by the cells are dragged away by our blood from different parts of our body and organs.

The blood also serves as our body's controller in temperature, for it takes in the heat from the places of our body. When it takes that heat, the blood will release them to cooler areas of our body. It also watches the pH level inside us and keeps it good and stable, and the amount of water our body needs. But most significantly, our blood has this particular function of carrying the specialized cells that we use to protect our insides against the organisms that give us various diseases. And to make the function of the blood more visible, let us focus on its ability to clot.

According to Rascob (2019), the blood clot is the solid mass that stops the hole in our torn vessel and guts. This happens every time we experience injuries. This changing of blood to a solid state in the injured part of an individual is called clotting.

And how does this clothing haooen? When we encounter an accident and gain an injury, the platelets in our blood will attach itself to the wall of the damaged part. After doing this, the platelets will stop and prevent the part from leaking more blood. There are lots of substances that have something to do with blood clotting. Some of them are prothrombin, thromboplastin, thrombin, and fibrin.

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The thromboplastin is an enzyme that comes from the platelets and the part of the injured blood vessel of an individual. This enzyme will then start a series of reactions controlled by the enzymes and result from the alternation of the prothrombin to thrombin. Lastly, this thrombin turns the plasma fibrinogen into threads of fibrin that trap our red blood cells and platelets. When this happens, blood clotting will be produced.

After stopping and aiding the injured part of an individual, the wound will be fixed with the help of the cells, which will restore what damages taken in our cells.

References:

Harvard Health Publishing. Blood clots: The good, the bad, and the deadly Published: April 2012. https://www.health.harvard.edu/heart-health/blood-clots-the-good-the-bad-and-the-deadly

Raskob G. Project informs efforts to understand and monitor number of people affected by blood clots in the Philippines. (Published October 15, 2015)

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