## BLOODAS Life

by Sophie Turfus

0,000,000,000,000! This is the number of red blood cells, the main ingredient, circulating in our "juice". And this blood travels in the 100,000 miles or so of blood vessels in the human body. Our red blood cells contain the amazing protein haemoglobin (270 million molecules in each cell, designed to carry oxygen). They also carry carbon dioxide, a major waste product, and nitric oxide, which controls vessel relaxation. Blood also carries nutrients obtained from our diet and other substances produced in our body. A very efficient all-in-one plumbing-and-sewage system indeed!

If we can imagine a plumbing system not just delivering essential utilities and removing waste, but one which is also self-cleansing, self-fixing, and able to defend against intruders, its creator would have received the Nobel Prize long ago.

Red blood cells race around our bodies with their friends, the 50,000,000,000 white blood cells, which serve as a natural barrier to infection. Some of them (macrophages, types of white blood cells that engulf and digest unwanted substances) even resemble mouths that swallow foreign material—think video game Pac-Man! Then, when these blood cells reach the end of their life, special stem cells create new ones to replace the old or damaged ones.

You may be aware of the ABO blood group system and Rhesus positive and negative categories. In New Zealand, the most common blood type is O positive, a characteristic of 38% of the population. There are, however, over 35 blood group systems giving rise to over 600 different blood types.

While AB positive blood can only be given to AB positive individuals, persons with the blood group O negative are universal donors. The latter are less susceptible to certain diseases, though mosquitos show a preference for that group. There are also genetic differences, for example in the production of Vitamin K levels that control the gentle balance between clotting (thrombosis) and bleeding (haemophilia). Scientists have long debated that particular groups may offer protection to individuals living in different geographical locations.

Personally, I'm one of those rare types, and I'm not referring to my

blood group. What I mean is that I'm a scientist who also happens to be a Christian, which in simple terms means to be a follower of Jesus Christ. Human blood is special, but to me, the blood of Jesus is exceptional.

There are so many analogies and metaphors that link to this thought, but the one I am thinking of right now is where it tells me in the Bible that his blood is somehow able to "purify us from all sin".<sup>1</sup>

Human blood can do all kinds of amazing things, but only the blood of Jesus can do that.

## **NOTES**

<sup>1</sup> 1 John 1:7.

Sophie Turfus, BSc (Hons), MSC, PhD, FHEA is a Senior Lecturer in Forensic Science at the School of Science, University of Greenwich.



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