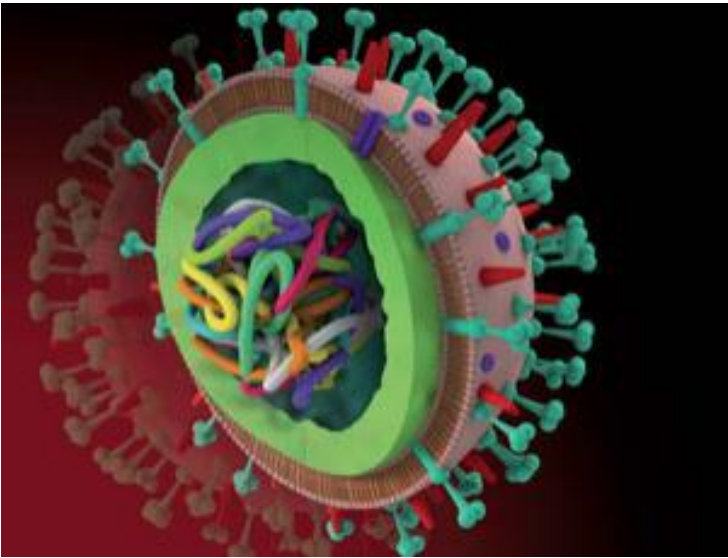


## Pull out toxins, viruses from your blood using a magnet!

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As a relief to the million patients suffering from sepsis and other infections, scientists recently announced that a new magnetic device could help extract bacteria, fungi and toxins from blood. Researchers also said that the device could be further adapted to remove deadly potent viruses like Ebola from the blood.

The invention published in the journal *'Medicine'* uses magnetic nanobeads, coated with a genetically-engineered human blood protein called MBL. This protein, researchers said, binds to toxins and pathogens which can then be pulled out with a magnet.

Mr Donald Ingber, study co-author, said, "The *'bio-spleen'* developed by us is currently tested in rats and can treat sepsis or blood infection that affects nearly 18 million people worldwide. The bio-spleen will physically clean up their blood, rapidly removing a wide spectrum of live pathogens as well as dead fragments and toxins from the blood."

Dr Ingber said that the cleansed blood is then returned to the circulatory system. He further added that this treatment could be taken even before pathogen was identified and the course of antibiotics was started.

Dr Ingber also stated that in the initial studies the device was found to be effective on Ebola, Marburg, and HIV viruses. He added that the device removed 90 percent of the bacteria in rat blood. He also mentioned that the device needed adequate testing before being approved for human use.