New genetic test unveils history of viral infections

US researchers claim to have developed a single test that is able to identify past exposure to every known human virus infection, using a drop of blood.

The technique decodes the infection history imprinted in our immune response.

The scientists hope that the test will eventually provide important insight into how viruses contribute to development of a range of diseases.

During a virus infection, your immune system generates antibodies designed to fight the virus. Each antibody recognises a tiny fragment of the virus and their interaction is very specific – they fit like a lock and key.

Virus-specific antibodies can be long-lived; often persisting many years after an infection has disappeared. So, your antibody repertoire represents a historical record of all of the viruses that have infected you.

This immunological catalogue has been used for years to identify past virus exposure, but the diagnostic tests routinely used have been limited to one, or at most a few, different virus strains.

The team used their test to interrogate sera obtained from more than 500 people of different ages and living in different global locations.

The data showed that the number of virus infections detected in people increased during life.

The study also suggested that those living in the U.S. were exposed to fewer infections than people living in South Africa, Thailand or Peru.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: <u>Test unravels history of infection</u>