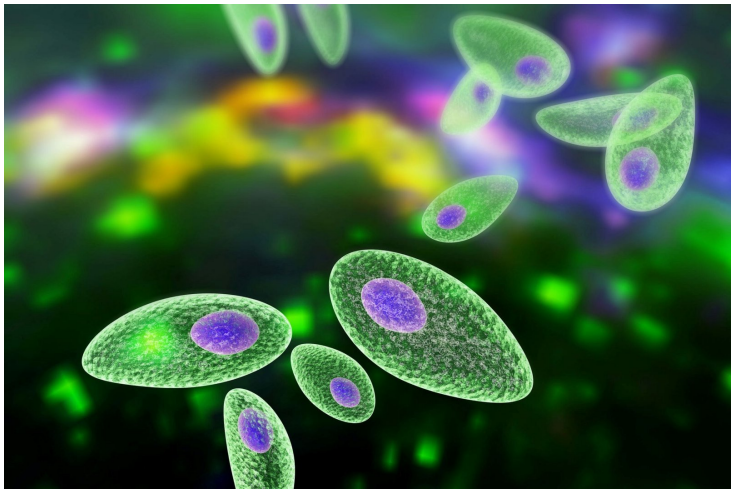
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ASIA EDITION

Australia develops online test to detect toxoplasmosis without need for blood sample

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This new online test doesn't replace a medical diagnosis



An international research team has developed an easy online test capable of detecting toxoplasmosis infection without a blood sample, opening the door for a better understanding of how the common parasite affects human behaviour.

Dr Michele Garagnani from the University of Melbourne (Australia), Carlos Alós-Ferrer from Lancaster University and Anja Achtziger from Zeppelin University, have developed the test which assesses an individual's reaction times to help determine whether they are infected with the protozoan parasite 'Toxoplasma gondii', which causes toxoplasmosis.

Until now, the only way of testing for infection was through a blood or saliva test.

To confirm the validity of the reaction test as a diagnostic tool, the research team conducted a head-to-head clinical trial comparing their proposed test against the conventional blood test.

Researchers measured the reaction times of 79 participants with an RhD-negative blood type and the results showed their new test had a 97 percent accuracy rate.

"If you have an RhD negative blood type, an underlying toxoplasmosis infection will worsen your reaction times by less than a second and while this difference is barely noticeable, it is enough for us to assess whether you're likely to be carrying the parasite," Dr Michele Garagnani said.

While this new online test doesn't replace a medical diagnosis, it gives researchers an opportunity to properly measure the changes toxoplasmosis infection can have on the population.

"It isn't practical or cost-effective to take enough blood samples to study behavioural effects of toxoplasmosis on a large scale," Dr Garagnani said.