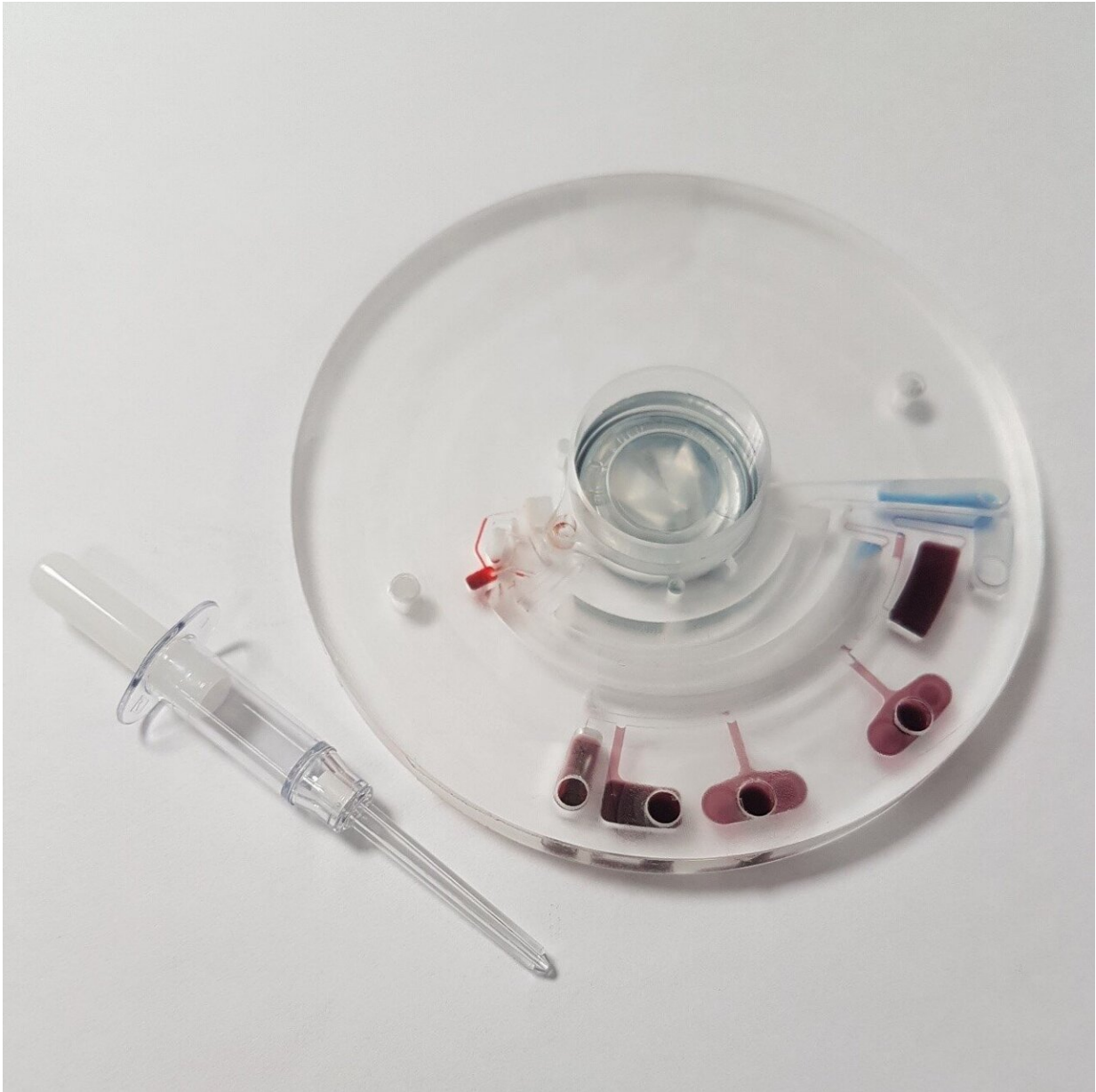


Blood disc for astronaut diagnosis

December 9 2021



Credit: Radisens Diagnostics

Specially designed to operate in weightlessness, this diagnostic disc can identify diabetes, cardiovascular disease and high cholesterol from a single drop of astronaut blood.

Future long duration space missions beyond Earth orbit will see crews isolated as never before. Astronauts will have to be self-sufficient in healthcare as in everything else.

Developed through ESA's General Support Technology Programme (GSTP) with Radisens Diagnostics in Ireland, this diagnostics device was designed for automated blood testing, overcoming processing difficulties due to microgravity by substituting centrifugal force.

A pinprick of blood is added to a mini-disc embedded with a wide variety of miniaturized test procedures. The disc is then inserted into the 'point-of-care' device and set spinning to spread the [blood sample](#) across the surface. Multiple tests can be performed simultaneously, with automated results delivered within a matter of minutes.

Provided by European Space Agency

Citation: Blood disc for astronaut diagnosis (2021, December 9) retrieved 25 April 2024 from <https://phys.org/news/2021-12-blood-disc-astronaut-diagnosis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.