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New Zealand offers improved alternative to screen patients with poor gut health

22 September 2022 | News

Surface mapping a reliable diagnostic tool for gut health

Non-invasive sensors laid on the skin's surface to measure bioelectrical activity could offer a better alternative for patients suffering with poor gut health.

Researchers at the Auckland Bioengineering Institute (ABI) in New Zealand and the Faculty of Medical and Health Sciences' Department of Surgery have employed a novel device using a sticky patch of sensors and a recording device and associated techniques to create a new and reliable non-invasive tool to map electrical waves from the stomach.

Coined "Body Surface Gastric Mapping" (BSGM), the method has proven a reliable detector of gastric slow wave activity and has now led to an exciting and unexpected discovery identifying two distinct disease subgroups in chronic nausea and vomiting syndromes.

"With this bio-electrical information on hand to inform clinical guidance or treatment, people experiencing chronic vomiting or nausea may be directed to different pathways and may receive diagnosis and more appropriate treatment options sooner", said the researchers.

Image caption- Stefan Calder, a recent PhD graduate at the Auckland Bioengineering Institute (ABI), at Waipapa Taumata Rau, University of Auckland (credit-auckland.ac.nz)