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MEDICINE

# Team creates stool test to detect autism in infants

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Parents can soon know whether their young child has a symptom of autism by testing the toddler's stool using a new kit developed by researchers in Hong Kong, who claim the analysis has an accuracy rate of 94 per cent.

Researchers at Chinese University's medical school collected faecal samples from 1,627 children aged from one to 13 from 2021 to 2023, and found that

children with autism had alterations in their gut microbial species. This showed that the microbiome could contribute to the development of autism spectrum disorder.

"Children who show symptoms of autism usually have to wait for 12 to 18 months to get diagnosed. That's why we hope children can be diagnosed as soon as possible through early intervention with our stool test kit," Croucher Professor in Medical Sciences Ng Siew-chien said.

The test kit, which will be

available by the end of this year, requires parents to collect a sample of their children's stool in a bottle and mix it with certain chemicals.

After sending the sample to designated labs, an in-depth analysis will be conducted using artificial intelligence technology, with the results available after a week.

According to statistics from the World Health Organization, 1 per cent of children are diagnosed with autism globally.

Ng said the stool test would

accurately and rapidly predict early risks of autism, and while it targeted children under four years old, it could also be applied to those who were slightly older.

Professor Francis Chan Ka-leung said the test kit was an early, time-saving measure that would allow children at risk of autism to seek medical intervention as early as possible.

He added that the test could also help those dealing with suspected but unclear symptoms, allowing parents to ascertain whether their children were

indeed suffering from autism-related symptoms.

"The test kit also allows young infants to be tested for the risk of autism. Parents no longer have to wait until they are five to six to determine whether their child truly has autism or not," Chan said.

The test kit will be made available for online purchase and at mental health clinics in the city. The cost of the test kit has not been disclosed but will be released closer to its roll out, according to the researchers.