

2,000 children to take part in food allergy study as clinic cases rise in Singapore

Hospitals are seeing more severe food allergy cases among kids, and researchers aim to better understand how big the issue really is.



A baby being fed. (File photo: iStock/BbenPhotographer)

Ms Amanda Chan's son Corey was about four months old when she learnt that he had food allergies, setting off an "incredibly tough" first year of his life.

"Three meals a day became a bit of a traumatic experience, because at that point, he couldn't speak. So anything I put in his mouth, I didn't know whether I was going to be harming him," said Ms Chan.

Corey, now 10, has been allergic to eggs, dairy, peanuts and dust mites since infancy. In the early years, the lack of awareness and information on food allergies in the local context was a challenge for Ms Chan.

"We didn't understand that food allergy could actually be airborne. And even though he was not eating solids, he was still reacting," she said.

A new clinical study announced on Thursday (Jun 26, 2025) aims to answer questions about the prevalence and impact of food allergies among children in Singapore.

This comes amid a steady rise in paediatric food allergy cases seen at clinics under the National University Hospital (NUH) and KK Women's and Children's Hospital (KKH).

Four-year study

The four-year study is led by NUH and the National University of Singapore (NUS) Yong Loo Lin School of Medicine, in collaboration with KKH, National University Polyclinics (NUP) and NUS Saw Swee Hock School of Public Health.

Named **the Singapore Food Allergy Story**, it is the first and largest study to provide a holistic overview of the burden of food allergies in Singapore, according to a media release by the health institutions.

Common allergens in the clinic cases seen at NUH and KKH include eggs, milk and peanuts in younger children, and shellfish in adolescents and young adults.

Food allergies have no definitive cure apart from natural outgrowing, and those caring for children with food allergies may face challenges like anxiety, hypervigilance and stress, according to the release.

On the ground, NUH and KKH have reported more emergency department visits for childhood anaphylaxis between 2015 and 2022, driven mainly by an increase in visits for food-related anaphylaxis.

Anaphylaxis refers to a severe and immediate allergic reaction, with symptoms that can affect breathing and blood circulation.

The increase in emergency department visits has not translated into a rise in severe anaphylaxis, shock or high dependency admissions, said the study's lead principal investigator, Associate Professor Elizabeth Tham.

At NUH and KKH, the number of food allergy evaluations carried out on children has also risen by 60 per cent from 2022 to 2024.

While this may reflect increasing awareness and concern among parents, it potentially highlights food allergy as an emerging condition in Singapore, said the health institutions.

There is no formal data showing a rise in the prevalence of childhood food allergies in Singapore at this time, hence the need for the study, said Assoc Prof Tham, who is a senior consultant in paediatrics at NUH.

Food allergy prevalence

Food allergy prevalence is rising worldwide in developed countries, and while historically thought to be uncommon in Asia, this is based on outdated data from 10 to 15 years ago, she added.

One possible cause is the adoption of more westernised lifestyles and diets. Dietary changes and changes in the environment can increase the risk of allergies, said Assoc Prof Tham.

Other factors are more awareness around food allergies and changing severity around them, prompting parents to seek medical intervention, she said.

There is also scientific evidence that lower exposure to bacteria and germs can be a contributory factor, said Dr Chong Kok Wee, the study's co-investigator and senior consultant in paediatric medicine at KKH.

Aside from prevalence, the Singapore study also aims to determine the impact of childhood food allergies on nutrition, growth, metabolism and mental health, and gain insights on the social and economic burden of food allergies.

Goal of the study

"Our goal is to create a safer environment for children with food allergies, enabling them to reach their fullest potential at school and work.

"Additionally, we aim to improve mental health and overall well-being, especially for older children and adolescents," said Assoc Prof Tham.

In the first phase of the study, which started this February, at least 2,000 parents and caregivers of children aged one to two years will be given questionnaires during their routine visits to NUP polyclinics.

Those reporting possible allergic reactions to food will be referred to NUH or KKH for further evaluation.

The second phase, starting in July, will involve about 400 children and adolescents aged up to 18 who have diagnosed allergies to milk, eggs, peanuts and shellfish.

They will participate in questionnaires, growth and nutritional assessments, and blood and stool collection.

Findings from the study are expected to inform future guidelines and educational materials on nutrition, dietary management and mental health support for affected families.

Studies in other places have found that food allergies are on the rise among children. In Asia, data from South Korea, Taiwan and Hong Kong show that the incidence of childhood anaphylaxis has risen.

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