

## **FOR IMMEDIATE RELEASE**

1 February 2017

### **EXPANDED TREATMENT BRINGS HOPE FOR CHILDREN WITH FOOD ALLERGIES**

Children with persistent allergies to cow's milk, egg and tree nuts such as cashew and pistachio will now be able to consume these foods without adverse reaction if they successfully undergo and complete the programme.

Some examples of the common food allergies in Singapore are peanut, shellfish and egg.

Ingestion of a tiny amount of food which a child is allergic to can cause a range of effects. These can be mild such as a rash to a severe or life-threatening reaction known as anaphylaxis. A reaction usually occurs within seconds or minutes of exposure to the allergen and in severe cases, it can lead to death if left untreated.

The Food Oral Immunotherapy (FOI) programme for peanut started in the National University Hospital (NUH) in August 2015. During the treatment, patients are introduced to a minuscule amount of food allergen which then increases gradually.

The first such programme in Singapore is run by the team from the NUH Division of Paediatric Allergy, Immunology and Rheumatology. About 20 children ranging from six to sixteen years old with persistent food allergy have undergone, or are undergoing treatment at this time. Children who are unable to outgrow their allergy after the age of five are considered to have persistent allergy.

When a person has a food allergy, avoidance of that food is the standard advice given.

Dr Soh Jian Yi, Consultant from the Division of Paediatric Allergy, Immunology and Rheumatology who helms the service, shares "The patient has to avoid that food, and this places restrictions on the patient as well as the family. There is also the psychological burden of constantly being on the alert, checking labels and foods taken outside of the home. In the case of a persistent food allergy, this means years of carrying this burden."

Even with these sacrifices, total avoidance is not always possible because ingredients such as peanut, milk, egg and dairy are often hidden in many foods. Hence accidental ingestion, with the risks of a potentially severe adverse reaction still occurs.

FOI works by raising the threshold of reaction, which is the minimum amount the child with allergy must consume to cause an adverse reaction. For example, the child who would have anaphylaxis on taking 1/200<sup>th</sup> of a peanut can raise that threshold of reaction to 10, 20 or more peanuts.

Before enrolling in the programme, a consultation in the clinic involving the child and family is required. A baseline food challenge is done at the second visit, starting with a minuscule amount of the food allergen and increasing until the child has a reaction. This is important for confirming the presence of an allergy, as well as the starting dose of treatment. In rare cases, children who were thought to have persistent allergy were discovered to have outgrown it.

The first dose is performed under monitoring and supervision, with observation for two hours. The child is then discharged and takes the exact same dose of allergen once a day, at home under the supervision of a parent.

Each increase in dose requires a visit to the hospital. It occurs once in two weeks, or less often, as the visit day and time can be adjusted to fit the schedule of the family and child.

Each hospital visit requires two hours of observation, during which time the child and accompanying family member can watch television, read their storybooks, or spend the time within safe limits of being in the ward.

The duration of treatment can range from a few months to a year. In addition to the family's schedule, the duration is also based on the starting dose for the child and the final target the child and family eventually decide. The exact and final target of the amount of allergen that can be safely consumed is often dependent on how much the child likes the taste of the food and the parents' comfort. In cases where the child does not like the taste, the threshold of reaction will be raised to one where he or she can at least accidentally take small amounts of the food hidden in the daily environment without any problems.

At the end of the programme, the child has to take the allergen in the form and dose they choose, at least twice a week to maintain its effect.

The team has started the FOI programme for cow's milk and will be implementing the rest in the later part of this year. FOI programme for shellfish is currently in the research phase.

**- END -**

### **About the National University Hospital**

The NUH is a tertiary hospital and major referral centre for a comprehensive range of medical, surgical and dental specialties. The Hospital also provides organ transplant programmes for adults (in kidney, liver and pancreas) and is the only public hospital in Singapore to offer a paediatric kidney and liver transplant programme.

Staffed by a team of healthcare professionals who rank among the best in the field, the NUH offers quality patient care by embracing innovations and advances in medical treatment.

In 2004, the NUH became the first Singapore hospital to receive the Joint Commission International (JCI) accreditation, an international stamp for excellent clinical practices in patient care and safety. Today, patient safety and good clinical outcomes remain the focus of the hospital as it continues to play a key role in the training of doctors, nurses and allied health professionals, and in translational research which paves the way for new cures and treatment, offering patients hope and a new lease of life.



A member of the National University Health System, it is the principal teaching hospital of the NUS Yong Loo Lin School of Medicine and the NUS Faculty of Dentistry.

For more information, please visit [www.nuh.com.sg](http://www.nuh.com.sg)