



NEIGHBORS

Expert discusses new treatment that offers hope

Could there be a cure for peanut allergies in children?

A treatment program designed for peanut-allergic preschoolers and babies has proven effective at helping children overcome their life-threatening food allergy, says an allergist from a top American hospital, Cleveland Clinic. She describes it as a life-changing – and perhaps life-saving – outcome.

Sandra Hong, MD, Director of the Food Allergy Center of Excellence at Cleveland Clinic, explains that a food allergy is a condition where the body's immune system identifies a food (such as peanuts) as harmful. The immune system then launches into attack mode and releases antibodies to combat the threat. The reaction can lead to hives, vomiting or – in worst case scenarios – constriction of airways and even death.

While data are not available on prevalence worldwide, in the U.S., currently more than 1 million children live with a peanut allergy and the knowledge that one bite of the food could be deadly. "For us to be able to help someone move past that – it's the most rewarding part of our careers," says Dr. Hong.

That optimism reflects the findings so far from an early peanut oral immunotherapy (EPOIT) treatment program developed at Cleveland Clinic.

In the program, children age four and younger who are allergic to peanuts build a tolerance to peanuts by ingesting minuscule amounts of the food in a step-by-step, allergist-supervised process. Doses are increased gradually over many months.

This approach represents a reversal from clinical guidelines shared by al-

lergists a decade ago. Looking at the older approach, Dr Hong explains that as food allergy numbers began spiking in the U.S. in the 1990s, doctors recommended that allergenic foods such as milk, eggs and peanuts be removed from the diets of children with a high risk of allergies.

That thinking began to change, though, as research showed that eliminating specific foods did not slow the development of food allergies.

Then came the groundbreaking Learning Early About Peanut (LEAP) allergy study in 2015. The study found that the development of peanut allergies decreased in at-risk children with an early introduction of the food.

"It was completely the opposite of what we had believed," notes Dr. Hong.

Next steps in peanut allergy treatments

Ongoing treatment programs aim to refine the treatment process that grew from the LEAP study, says Dr. Hong. More than 50 children with an identified peanut allergy are in the program.

The minimal goal is to help these children achieve at least "bite-proof" tolerance to peanuts, meaning they can consume nearly two peanut kernels without a reaction, says Dr. Hong. That protects against an accidental nibble of a food with peanuts leading to a health emergency.

Many participants, however, see their immune system response change so much that they can eat peanut products, says Dr. Hong.

The key is the age of the participants, as reactions to food allergens typical-

ly are less severe in early childhood. "Their immune system is so malleable, so flexible, that they can tolerate it," notes Dr. Hong. "There is this narrow window where we can do this."

The series of peanut doses given to participants involve tiny amounts of the food. In the initial treatment cycle, for example, the daily dose is 8 milligrams of peanut protein.

Small increases follow every two weeks if there are no setbacks, says Dr. Hong. The process takes at least four to six months, with maintenance dosing then continuing for at least a year.

Every uptick in peanut butter dosage takes place in an allergist's office in case there's a reaction. "This is not something you do at home," stresses Dr. Hong. The child is monitored for an hour after the higher dose.

Of the children in the Cleveland Clinic program, more than 80% now possess "bite-proof" tolerance or are building up to that level.

The future outlook for children with peanut allergies

Currently, one in five children with a peanut allergy outgrows the condition before adulthood. Dr. Hong says advances in treatment could reverse those numbers, with as many as four in five children leaving their peanut worries behind.

Dr. Hong believes the number of children with severe peanut allergies will soon begin to decline. "We're moving toward a cure," she says, "and a lot less worry for families."



A view of GluCare Integrated Diabetes Center in UAE

Those unaware could be leaving it too late

Ticking timebomb: Prediabetes rising in UAE

The UAE's population is facing a silent health crisis, as research from GluCare Integrated Diabetes Center reveals that almost 15 per cent of people in the UAE are living with Prediabetes. Often caused by lifestyle choices, it is most prevalent among UAE nationals, with around 19 per cent of Emiratis and 15 per cent of expatriates living with the condition.

Labelled a 'ticking timebomb', Prediabetes, can cause serious and long-lasting health problems for patients and shows very little symptoms until it is in its advanced stages. Prediabetes is caused by the body not responding in the normal way to insulin produced by the pancreas. A naturally occurring hormone, insulin lets blood sugar into cells to use as energy. Prediabetes usually occurs in people who already have some insulin resistance or whose cells aren't making enough insulin to keep blood glucose within the normal range. Eventually, without enough insulin, the extra glucose stays in the bloodstream and overtime can develop Type 2 Diabetes.

With no clear symptoms in the early stages, prediabetes can go years without ever being detected, affecting around 1.2 M people in the Emirates. Those aged over 30, who are overweight, have a relative with Type 2 Diabetes, have a family history of hypertension, cardiovascular disease or elevated blood fats and who are physically active less than three times a week, are those who are most at risk and should be screened as per the UAE guidelines. In some cases, the disease only reveals itself and its long-term implications when patients need urgent medical attention. Health experts at GluCare Integrated Diabetes Center, warn that Prediabetes patients almost always develop Type 2 Diabetes and are at increased risk of heart disease and stroke if it continues to be untreated.

Ihsan Almarzooqi, GluCare Co-Founder and Managing Director, said "Prediabetes is rising in the region and the number of people impacted is alarming. Prediabetes is reversible, Type 2 Diabetes is not, although it can go into remission, so proactivity in the treatment of this condition is critical. There are two ways of testing, first is to do an informal assessment of risk factors, usually best for asymptomatic adults, or the second option is to do a blood test. The key to reversing Prediabetes is really all about education on the lifestyle choices that are needed and increasing awareness about how the foods we eat and the levels of physical activity we partake in can dramatically impact our health."

"If you are diagnosed, there is still a really high chance that you will be able to cure this condition. The key to managing Prediabetes is to focus on preventative healthcare. Monitoring the condition in real time as opposed to every three months with blood tests which is the traditional method of care, is essential. We have developed a number of technological aids that use artificial intelligence and continuous data to monitor and advise our patients in real time, 24/7, and we partner this with understanding and empathetic medical professionals who look after our patients physical and mental needs, helping them to make the lifestyle changes they need to really improve their health," said Dr Almarzooqi.

For those who think they may be at risk from Prediabetes, call GluCare Integrated Diabetes Centre to book your consultation and test on +971 (0)4 220 1570 and visit them at their clinic on Al Wasl Road.

About GluCare Integrated Diabetes Center:

The first diabetes clinic of its kind in the world, GluCare is reinventing diabetes care and transforming lives. Conceptualized in the UAE and opening the doors to its state-of-the-art 10,000 sq. foot Dubai clinic in September 2020, it is the world's first healthcare provider to empower both clinicians and patients through Integrated Continuous Monitoring as part of its standard model of care, an innovative and highly personalized 'continuous healthcare' approach that provides a comprehensive, and real-time view of patients. As part of its unique model, GluCare is also an early adopter of – and the region's first clinic to use – Digital Therapeutics (DTx), combining it with wearable and smart technology, artificial intelligence, unique in-clinic workflows, and a caring and connected expert care team. Applying technology as a humanizing force, GluCare's team partners with diabetes patients and their families, giving them the tools, knowledge, and continuous support to live longer, healthier, and more fulfilling lives. www.gluCare.health

GluCare's results vastly out-perform traditional care (results over 3 months):

- Average reduction in HbA1C = -2.14%
- Weight reduction = -4.55%
- Reduction in LDL = -17.25%
- Blood sugar time in range = +76.9% (An average of 12,000+ glucose

readings per patient per month)

URAC Accreditation

GluCare is the first facility outside of the United States to be accredited by URAC in patient management using digital health. GluCare methodology of diabetes management uses a myriad of elements including a physical infrastructure, digital therapeutics, artificial intelligence and remote patient monitoring, and the accreditation demonstrates the commitment to quality care for GluCare patients.

Integrated Continuous Monitoring (ICM)

GluCare is the first provider in the world to move away from a traditional episodic care model to an Integrated Continuous Monitoring (ICM) methodology. GluCare's physicians are specially trained in using ICM to assist patients. ICM is a new category of personalized, preventative healthcare services that utilizes continuous health information from users through a clinical-grade multi-sensor band, a Continuous Glucose Monitor (CGM), a mobile app, combined with cloud based artificial intelligence (AI) tools and working alongside medical professionals to take care of users on a day-to-day basis for several disease conditions.

Prediabetes

Prediabetes usually occurs in people who have some insulin resistance or whose beta cells in the pancreas aren't making enough insulin to keep the blood glucose within the normal range. Without enough insulin, extra glucose stays in the bloodstream rather than entering the cells meaning that the blood glucose levels are higher than normal but not high enough to be diagnosed as diabetes. This condition, overtime, could develop Type 2 Diabetes.

Type 2 diabetes

Type 2 Diabetes occurs when the body isn't able to effectively use insulin to bring glucose in the cells, therefore, the body starts progressively losing adequate beta cells. This causes your body to rely on alternative energy sources in your tissues, muscles, and organs.

Type 1 diabetes

Type 1 Diabetes occurs due to an autoimmune beta cells destruction, usually leading to absolute insulin deficiency, including latent autoimmune diabetes of adulthood (ADA 2021)

editor's choice

