

Skin patch shows promise in easing peanut allergy

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Wearable device appears to 'educate' cells not to react to the food allergen, researchers say.

A wearable patch that safely and gradually exposes the body to small amounts of peanut allergen appears effective in easing the allergy, an early new study shows.

The Viaskin peanut [patch](#), worn for a year by peanut-allergic children and adults, appears to "educate cells to turn off the allergic reaction," said lead researcher Dr. Hugh Sampson, director of the Jaffe Food Allergy Institute at Kravis Children's Hospital at Mount Sinai in New York City.

His team was scheduled to present the study results Sunday in Houston at the annual meeting of the American Academy of Allergy, Asthma and

Immunology. The study was funded by DBV technologies, which is developing the patch.

Peanut allergy is one of the most common food allergies, and can cause a severe and potentially fatal allergic reaction known as anaphylaxis if the person comes into contact with peanut.

In recent years, immunotherapy—where the allergic person is safely exposed to small but increasing amounts of peanut under a doctor's supervision—has shown promise in easing the allergy.

As it's done now, immunotherapy involves having people eat increasing amounts of the food they are allergic to. "That has been effective," Sampson said, "but there has been a high rate of adverse reaction, such as itchy mouth, swollen mouth and stomach." He said the new skin patch may be a way to avoid these reactions.

According to Sampson, the new Viaskin patch works by exposing users to a controlled amount of peanut allergen in hopes of increasing their tolerance.

The new study involved 221 people, ages 6 to 55, with [peanut allergy](#). The researchers tried varying patch doses to see which was most effective. In addition, some participants were given a placebo.

Half of the participants wore the Viaskin patch for a year, and by the end of that time they were able to tolerate at least 1 gram of peanut protein—about four peanuts.

That's about 10 times the dose they could tolerate at the start of the study, Sampson noted. "This is a new way to do immunotherapy," he said.

As people wear the patch for several years, their tolerance to peanuts should improve, Sampson said. "It is likely that we will see a better response as it goes longer," he said.

The patch appears safe: more than 95 percent of study participants used the patch as directed, and less than 1 percent dropped out due to adverse effects, the researchers said.

Even the levels of peanut tolerance attained in a year "would protect you from small contaminations like at a restaurant or at a party," Sampson said. "And you wouldn't have to worry about labels that say, 'May contain peanut.' "

"We can really change the quality of life for those allergic to peanuts," he said.

The patch was most effective in children, meaning that larger doses may be needed for adults, Sampson said. He added that it will take several years—and larger trials—before the patch may be approved for use.

Dr. Vivian Hernandez-Trujillo is director of allergy and immunology at Miami Children's Hospital. She said that "this is a very exciting time for patients with peanut allergy. I am speaking not only as an allergist, but as a mom of a child with peanut allergy."

The patch appears to be a "groundbreaking treatment option," she added, since there appeared to be no adverse reactions to the patch.

The fear of having a severe allergic reaction is "the scariest thing anyone with an allergy to peanut lives with," Hernandez-Trujillo said. "As a parent of a child with [peanut](#) allergy, the biggest concern is that you are living with the possibility of having to deal with a reaction on an everyday basis. The hope is that if children can tolerate the patch, they

will not have a severe life-threatening reaction."

Peanut [allergy](#) has been increasing around the world, but it isn't clear why, Hernandez-Trujillo said. "We really don't have a good explanation for it."

Experts note that findings presented at medical meetings are typically considered preliminary until published in a peer-reviewed journal.

More information: Find out more about peanut allergy at [Food Allergy Research & Education](#).

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