Peanut allergies are among the most common and most dangerous food allergies. A tiny exposure to peanuts can mean big trouble for a person with a peanut allergy, with symptoms ranging from sneezing or coughing to the constriction, or narrowing, of airways. Some people die from the exposure.

But a tiny exposure may help scientists find a cure. A recent study suggests that some children may be able to beat back their allergic reactions to peanuts by gradually introducing trace amounts of the nut into their diets. It's too early to say for certain, so if you have a peanut allergy, do not try this at home. But the first results look promising.

Two teams of scientists have been experimenting on a group of 29 children, with an average age five years old, who are allergic to peanuts. At the beginning of the study, each kid received less than 1/1,000th of a peanut per day. (Imagine splitting a peanut into 1,000 parts!) Over the course of the study, the children gradually increased the amount of peanuts in their diets. At home, their parents sprinkled peanut powder on their food, and in the laboratory, the children drank solutions with peanuts dissolved inside.

Nine of the children have been receiving the treatment for two years. Five of those nine now appear to be free of their peanut allergies, says Wesley Burks, a pediatric allergist and immunologist at Duke University Medical Center in Durham, N.C. These five kids can eat peanuts with no problem. “They are putting peanuts in their diet”, Burks says.

Of those nine, the other four have not benefited as much from the therapy. Burks and his team will release data from the other 20 children in the study later this year.

The two teams of scientists are now doing a follow-up study on two groups of children with the allergy. Children in one group will receive the gradual peanut therapy, and the others will not. Burks and the other researchers hope this study will help them learn if the therapy truly works or not.

The study raises many questions, both from parents of children with the allergies and from other doctors. Scott Sicherer, an allergist at Mount Sinai School of Medicine in New York City, asks, “Have we really cured the allergy, or are [the patients] just desensitized while they are getting the treatment?”

Scientists don't understand why some people get peanut allergies and others don't, but they're scrambling to find a way to help people with the allergy. Because of the severity of a peanut allergy, scientists want to know as soon as possible. “This is very encouraging, but it's not something you try at home”, says Sicherer.

1. How did scientists “cure” the peanut allergies from the 29 students they worked with?

2. What symptoms, or signs, do you think a person shows when they are allergic to something?