

Autism tied to autoimmune diseases in immediate family

By [Liz Szabo](#), USA TODAY

Danish researchers have found another clue to the mysterious causes of autism, according to a study published online this month in *Pediatrics*.

In a study of children born in Denmark from 1993 to 2004, doctors found that many children with autism or related disorders also had a family history of autoimmune diseases. Autoimmune diseases, such as type 1 diabetes and rheumatoid arthritis, develop when antibodies that normally fight infectious organisms instead attack the body itself.

In the study, doctors examined patterns of disease among children, mothers, fathers and siblings.

For the first time, researchers found an increased risk of autism spectrum disorders in children whose mothers have celiac disease, a digestive condition in which people cannot tolerate gluten, a protein found in wheat, rye and barley. Autism spectrum disorders include a range of neurological problems affecting communication and socializing.

The study also confirms the results of many earlier papers, says author Hjördis Atladottir of Denmark's University of Aarhus. For example, doctors found an increased risk of autism in children with a family history of type 1 diabetes and an increased risk of autism spectrum disorders in children whose mothers have rheumatoid arthritis.

Researchers say their study leaves many questions unanswered. But they say it's possible babies are affected by their mother's antibodies while in the womb. Their mother's disease also may create an abnormal environment.

Although the study is designed to find associations among diseases, it is not able to prove that autoimmune disorders cause autism, says the University of Washington's Karen Toth, a clinical psychologist who was not involved in the study.

But Toth says it's possible that the same genes are involved in autoimmune diseases and autism. Researchers have known for many years that autism can run in families, Toth says. And scientists have found genes that may be involved in autism.

Children may also have an increased risk if they are exposed in the womb to certain drugs — such as thalidomide, valproic acid or cocaine — or to infectious diseases such as rubella, Toth says.

Recent studies also have found that babies born prematurely have higher risks of autism.

Children also are at higher risk if their fathers are older than 40 or if children have conditions such as epilepsy or Fragile X syndrome, which causes mental retardation, according to the Mayo Clinic.

People with autoimmune diseases shouldn't be alarmed, Atladottir says. The vast majority of people with these conditions do not have children with autism, he says. In the study, only 3,325 of the more than 689,196 children studied were diagnosed with autism spectrum disorders.