The immune system's role in the body is more than just fighting off infections.

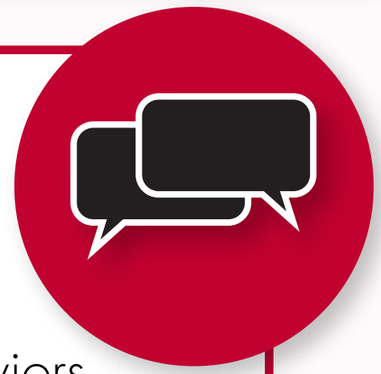
Immune system function is important to **early development**, **tissue maintenance**, and **healthy aging**.
An **antibody** is part of the immune system that identifies threats from foreign substances like bacteria or viruses.

Sometimes antibodies react to the body's own cells as a a threat.

These are called **autoantibodies**.

Nearly **20%** of mothers of autistic children have a particular pattern of autoantibodies.

Mice exposed to these autism-related maternal autoantibodies had an increased brain size.



The mice showed altered social and repetitive behaviors.

Researchers looked at the effect of maternal autoantibodies on brain development in mice.

Some parts of the brain, like the amygdala and white matter, were more affected than others.

Male and female offspring were affected differently.

Maternal autoantibodies directly impact brain growth and development. This may underlie the development of autism in some individuals.

Next, we hope to understand how these autoantibodies lead to these outcomes so we can to improve early identification and access to services to improve the lives of autistic individuals.