

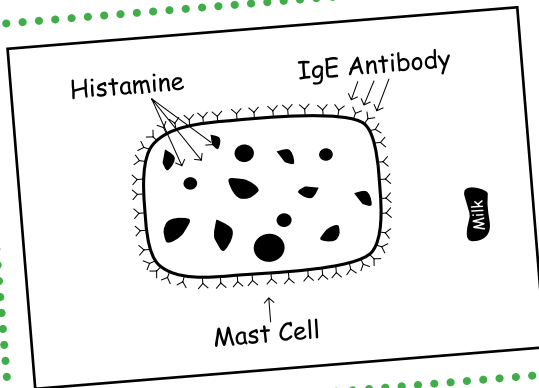
# Food Foes

The body uses its immune system to protect itself from infections and damaging substances. Food-allergy attacks happen when the immune system mistakenly identifies a normally harmless food as harmful to the body and attacks it. When the food enters the body, the immune system releases histamines and other chemicals that cause the signs of an allergic reaction. Signs of a reaction can include itching, swelling, rashes and difficulty breathing.

**The diagrams below show what happens inside the body during an allergic reaction. In this case, the food allergen, or the food that the person is allergic to, is milk.**

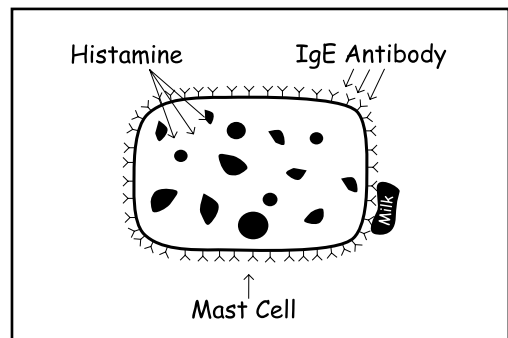
## REACTION: Step 1

Most people with allergies make tiny molecules called IgE antibodies. The antibodies are like tiny antennae that can tell when the food a person is allergic to enters the body. These antennae sit on cells called mast cells, which appear throughout the body.



## REACTION: Step 2

Mast cells are filled with chemicals. Some of those chemicals are histamines. When someone with a food allergy eats the food they are allergic to, the proteins of that food (the part of the food that causes the allergy) attach to the IgE antibodies on the mast cell.



## REACTION: Step 3

When the food proteins attach to the IgE antibodies, the mast cell explodes. It sends histamines and other chemicals throughout the body. The chemicals cause the signs of an allergic reaction.

